



**CALIFORNIA AND THE  
WORLD OCEAN 2006**

# CONFERENCE PROGRAM

**IMPLEMENTING THE VISION FOR  
OCEAN AND COASTAL PROTECTION**

CWO  
06

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California Environmental Protection Agency  
California Coastal Conservancy Association

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We would like to extend our deepest  
gratitude to all organizers and sponsors  
who have made *CWO '06* possible.

## WELCOME FROM THE GOVERNOR



GOVERNOR ARNOLD SCHWARZENEGGER

September 17, 2006



### *California and the World Ocean*

I am pleased to offer my warmest greetings to all those gathered for the California and the World Ocean 2006 conference.

Eternity, it's said, begins and ends with the ocean's tides. As dedicated conservationists join together to plan the future protection of our majestic coast, we must remember that it is not only nature, but history that we are protecting.

When Juan Cabrillo discovered California in 1542, he first laid eyes upon the state from the waters of San Diego Bay. Now, more than 450 years later, beachfront communities continue to be an essential part of the state's beauty and commerce. Thus, defending our oceans is a matter of safeguarding the Golden State's way of life.

Our state remains one of the most ecologically stunning in the world, but this heritage is not guaranteed to last forever. Preserving it will require a tireless effort by all citizens, and this conference provides an invaluable example of such daring commitment.

Thank you for your hard work on behalf of our state's environmental legacy. Your actions are instrumental in rebuilding California.

Sincerely,



Arnold Schwarzenegger

STATE CAPITOL • SACRAMENTO, CALIFORNIA 95814 • (916) 445-2841



## WELCOME FROM THE CONFERENCE CHAIRS



## CALIFORNIA AND THE WORLD OCEAN '06

Mike Chrisman  
Conference Co-Chair  
Secretary for Resources  
State of California

Steve Westly  
Conference Co-Chair  
Controller, State Lands Commission Chair  
State of California

Linda Adams  
Conference Co-Chair  
Secretary for Environmental Protection  
State of California

September 17, 2006

Dear CWO '06 attendees,

As the co-chairs of *California and the World Ocean '06* (CWO '06) and on behalf of the two other members of the California Ocean Protection Council, Senator Sheila Kuehl and Assemblymember Pedro Nava, we welcome you to Long Beach. For the fourth time in our state's history, California is convening this international conference focused on ocean and coastal protection. We are delighted to welcome attendees from across the state, country, and world to positively influence the course of ocean and coastal protection.

The U.S. Commission on Ocean Policy and the Pew Oceans Commission have documented that our nation's oceans and coastlines are in trouble and have developed hundreds of recommendations for improvement. New state ocean strategies and management councils are being formed around the nation in response. Governor Arnold Schwarzenegger released a forward-looking state ocean action plan, *Protecting Our Ocean: California's Action Strategy*. The Governor's ocean action plan called for the establishment of the California Ocean Protection Council (OPC) to lead the improvement of ocean protection in California.

The focus of CWO '06 is the implementation of the Five-Year Strategic Plan recently adopted by the OPC. As members of the OPC, we will set the stage for the conference in the opening plenary session by discussing our vision for action in implementing our strategic plan. We look forward to an active exchange of ideas between all conference speakers and attendees throughout the four days of the conference. We view this as an opportunity to discuss advancements in California, other states, and other nations. We are looking for recommendations on the top priorities of our plan for immediate action. We welcome specific ideas regarding how each action can best be implemented. We hope that participants from other states and nations will leave with new information and bold ideas that will address ongoing problems in California, as well as those that occur around the world.

Thank you for joining us for this unique conference. We look forward to an exciting four days!

Sincerely,



*Mike Chrisman*

Mike Chrisman  
Secretary for Resources  
Conference Co-Chair



*Steve Westly*

Steve Westly  
State Controller  
Conference Co-Chair



*Linda S. Adams*

Linda Adams  
Secretary for Environmental  
Protection  
Conference Co-Chair

CWO '06 ♦ September 17-20, 2006 ♦ Hyatt Regency ♦ Long Beach, California ♦ U.S.A.

Conference Headquarters

The Complete Conference, Inc. ♦ 1540 River Park Drive, Suite 111 ♦ Sacramento, California 95815 ♦ U.S.A. ♦ Phone 916.922.7032 ♦ Fax 916.922.7379  
[cwo2006@completeconference.com](mailto:cwo2006@completeconference.com) ♦ <http://resources.ca.gov/ocean/cwo06/>



## GENERAL INFORMATION



The Hyatt Regency Long Beach is the headquarters hotel for *California and the World Ocean '06*. All conference events Sunday, September 17 through Tuesday, September 19 will be on the upper floor of the Long Beach Convention Center, which is directly adjacent to the Hyatt Regency. All conference events on Wednesday, September 20 will be on the third level (fourth floor) of the Hyatt Regency. The reception on Tuesday, September 19, 6:30 p.m. will be held at the nearby Aquarium of the Pacific, 100 Aquarium Way, Long Beach.

**BUSINESS CENTER**

The Hyatt Regency business center is located on the mezzanine level of the hotel and is open 7 a.m. – 4 p.m., Monday-Friday. For a fee, they offer basic business services, including photocopies, printing, scanning, computer/internet use, faxes, and shipping.

**EXHIBIT HALL**

The Exhibit Hall in the Grand Ballroom of the Convention Center will be open Monday and Tuesday, 9 a.m. – 5 p.m., and during the Poster Session, 6:30 p.m. – 8:30 p.m., on Monday. All refreshment breaks on Monday and Tuesday will take place in the Exhibit Hall. Please take advantage of this opportunity to visit the diverse assemblage of exhibitors at *CWO '06*.

**INTERNET**

Wireless internet access is available in the lobby of the Convention Center. The rates are \$5.95 per hour or \$15.95 for all day. T-Mobile Hotspot wireless broadband is available in public areas of the Hyatt Regency at no additional cost for T-Mobile subscribers and \$9.95 per day for non-subscribers.

**PARKING**

Convention Center parking is \$8.00 per day. The Hyatt and Renaissance Hotels have parking for their hotel guests at \$16 per night for valet parking or \$12 per night for self parking.



Long Beach, California

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California Coastal Records Project,  
[www.Californiacoastline.org](http://www.Californiacoastline.org)

**PRESENTATION UPLOAD**

*Accepted media:* PowerPoint file saved on CD or USB flash drive. Imbedded video in the PowerPoint file will be accepted.

*Please note:* Slides and overhead transparencies will NOT be accepted.

*Presentation upload times:*

September 17 *	3 p.m. – 8 p.m.
September 18-20	7 a.m. – 7:45 a.m. 12:15 p.m. – 1:45 p.m.

\* Sunday, September 17 is the preferred time for presentation upload as there may be lines and delays during upload times September 18-20.

**PRESS**

All media representatives should check in at the Registration Desk upon arrival. Please direct all press inquiries to *CWO '06* Press Officers Sandy Cooney and BreAnda Northcutt. The Registration Desk will contact the press officers for press inquiries.

**POSTER SESSION**

The poster session will be held Monday, September 18, 6:30 p.m. – 8:30 p.m., in the Grand Ballroom and Exhibit Hall at the Convention Center. Poster set-up will take place 4:30 p.m. – 6:00 p.m. on Monday.

**REGISTRATION**

All attendees, including presenters and session chairs, are required to register. Sunday-Tuesday, registration will be located on the upper floor of the Convention Center. On Wednesday, registration will be on the third level (fourth floor) of the Hyatt. Please wear the name tag provided with your registration materials at all times for entrance to all sessions and events. The Registration Desk is open each day during the following hours:

Sunday, September 17	3 p.m. – 8 p.m.
Monday, September 18	7 a.m. – 6 p.m.
Tuesday, September 19	7 a.m. – 4 p.m.
Wednesday, September 20	7 a.m. – 12 p.m.

**SPEAKERS' BREAKFAST**

All speakers and session chairs are invited to a continental breakfast, 7 a.m. – 8 a.m., on the day of their session. This breakfast provides an opportunity to coordinate your session with your session chair and other speakers. Monday and Tuesday breakfasts are in the Convention Center, Room 203C, and the Wednesday breakfast is in the Beacon Rotunda at the Hyatt.

**VOLUNTEERS**

All volunteers are required to attend a volunteer meeting at 6:30 a.m. the morning they committed to volunteer, where they will receive their reimbursement check.



# SCHEDULE OF CONFERENCE EVENTS

SUNDAY, SEPTEMBER 17 CONVENTION CENTER	MONDAY, SEPTEMBER 18 CONVENTION CENTER	TUESDAY, SEPTEMBER 19 CONVENTION CENTER	WEDNESDAY, SEPTEMBER 20 HYATT REGENCY HOTEL
9:00am-5:00pm Field Trips	7:00am-6:00pm Registration 9:00am-5:00pm Exhibits Open 7:00am-8:00am Speakers' Breakfast (Speakers Only) 8:15am-9:45pm Opening Session	7:00am-4:00pm Registration 9:00am-5:00pm Exhibits Open 7:00am-8:00am Speakers' Breakfast (Speakers Only) 8:00am-9:45am Concurrent Sessions <b>D</b>	7:00am-12:00pm Registration 7:00am-8:00am Speakers' Breakfast (Speakers Only) 8:00am-9:45am Concurrent Sessions <b>H</b>
	9:45am Refreshment Break	9:45am Refreshment Break	9:45am Refreshment Break
12:00pm-3:00pm Exhibitor Set-up 3:00pm-8:00pm Registration	10:15am-12:00pm Concurrent Sessions <b>A</b> 12:15pm-1:45pm Ocean Commissions' Luncheon 2:00pm-3:45pm Concurrent Sessions <b>B</b>	10:15am-12:00pm Concurrent Sessions <b>E</b> 12:15pm-1:45pm Media Panel Luncheon 2:00pm-3:45pm Concurrent Sessions <b>F</b>	10:15am-12:00pm Concurrent Sessions <b>I</b> 12:15pm-1:45pm Luncheon and Closing Session
	3:45pm Refreshment Break	3:45pm Refreshment Break	
6:00pm-8:00pm Welcome Reception	4:15pm-6:00pm Concurrent Sessions <b>C</b> 6:30pm-8:30pm Reception and Poster Session (Exhibits Open)	4:15pm-6:00pm Concurrent Sessions <b>G</b> 6:30pm-11:00pm Reception at the Aquarium of the Pacific	

REFRESHMENTS WILL BE AVAILABLE IN THE EXHIBIT HALL DURING BREAKS.

# SCHEDULE OF CONCURRENT SESSIONS



INTERNATIONAL AND REGIONAL GOVERNANCE			OCEAN OBSERVING		VOLUNTEERS; PHYSICAL PROCESSES		MARINE PROTECTED AREAS		WATER QUALITY		RESTORATION AND RESEARCH		FISHERIES MANAGEMENT	
<b>A</b> 10:15am-12:00pm <b>MONDAY - CONVENTION CENTER</b>	The World Ocean and California	Rm. 204	California's Ocean Observatories	Rm. 203B	Volunteers Making a Difference	Rm. 203A	Marine Protected Areas: Experiences from Around the World	Rm. 202 B&C	Use and Abuse of Bacterial Indicators	Rm. 202A	Large-Scale Restoration Projects	Rm. 201B	Rebuilding Depleted Species: A Key Component of an Ecosystem-Based Approach	Rm. 201A
	West Coast Regional Collaboration on Ocean Health	Rm. 204	Management Applications of Infrastructure I	Rm. 203B	Sustaining Beaches through Regional Sediment Management	Rm. 203A	Lessons Learned from the California Marine Life Protection Act Initiative	Rm. 202 B&C	Envisioning a Better Ocean through a Watershed Point of View	Rm. 202A	Assessing the Success of Wetland Recovery Investments	Rm. 201B	Fisheries Management: Research and Case Studies	Rm. 201A
	Federal and State Roles in Regional Governance	Rm. 204	Management Applications of Infrastructure II	Rm. 203B	Regional Approaches to Shoreline Erosion and Management	Rm. 203A	Scientific Perspectives on the Marine Life Protection Act Initiative	Rm. 202 B&C	California's Coastal Non-Point Source Pollution Program	Rm. 202A	Development of the National Ocean Research Priorities Plan	Rm. 201B	Ecosystem-Based Fisheries Management	Rm. 201A
OCEAN AND COASTAL ZONE MANAGEMENT			EDUCATION		PHYSICAL PROCESSES		ECOSYSTEM-BASED MANAGEMENT (EBM)		WATER QUALITY		ECONOMIC USES AND INDUSTRY		SOCIO-ECONOMICS	
<b>D</b> 8:00am-9:45am <b>TUESDAY - CONVENTION CENTER</b>	Coastal Zone Management: Past, Present, and Future	Rm. 204	The Education and the Environment Initiative	Rm. 203B	Shoreline and Beach Management	Rm. 203A	Ocean Zoning: Examples of Ecosystem-Based Governance	Rm. 202 B&C	Technologies for Monitoring Bacteria in Recreational Water	Rm. 202A	Maritime Industries: A Glorious Past, An Uncertain Future	Rm. 201B	The Human Dimension of Fisheries Management	Rm. 201A
	State and Federal Partnerships in Coastal Management	Rm. 204	Ocean Education Programs for All Californians	Rm. 203B	Mapping Beach and Coastal Bluff Erosion	Rm. 203A	Improving Coordination and Collaboration to Advance EBM	Rm. 202 B&C	Areas of Special Biological Significance	Rm. 202A	Reducing Environmental Impacts of Energy and Industry	Rm. 201B	Commercial Fishing and California's Heritage Harbors	Rm. 201A
	Management Plans for California's National Marine Sanctuaries	Rm. 204	Ocean Literacy: Aquarium Collaborative and K-12 Education	Rm. 203B	Implications of a Rising Sea Level	Rm. 203A	Advancements in EBM	Rm. 202 B&C	Harmful Algal Blooms: Ecosystem Processes and Human Health Risk	Rm. 202A	Ocean Water Desalination: Needs vs. Wants	Rm. 201B	Got Aquaculture? Why Not?	Rm. 201A
	California Invasive Species Management	Rm. 204	Creating a Public Ocean Awareness Campaign	Rm. 203B	Coastal Hazards and Protection	Rm. 203A	Local and Regional Perspectives on EBM	Rm. 202 B&C	Endocrine Disruption: A New Threat for Coastal Fish	Rm. 202A	Rigs to Reefs: Decommissioning of California's Oil Platforms	Rm. 201B	Valuing California's Coast	Rm. 201A
PLACE-BASED MANAGEMENT			TECHNOLOGY		PHYSICAL PROCESSES		WILDLIFE		WATER QUALITY		ECONOMIC USES AND INDUSTRY		SEDIMENT AND WATER QUALITY	
<b>H</b> 8:00am-9:45am <b>WEDNESDAY - HYATT REGENCY</b>	Place-Based Management	Regency A	Integrating Emerging Technologies	Shoreline B	Tools to Support the Coastal Sediment Master Plan	Shoreline A	Wildlife Management and Conservation	Regency D	Clean Beaches Initiative Grant Program	Regency C	Atmospheric Deposition: Collaboration between Air and Water Boards	Regency B	Sediment Quality Objectives: Development and Application	Regency E
	Subtidal Management and Monitoring	Regency A	Seafloor Mapping	Shoreline B			Impacts of Pollution on Sea Otter Health	Regency D	Watershed Management: Managing Land-Based Sources of Runoff	Regency C	Resolving Air Pollution Impacts of Maritime Cargo Movement	Regency B	Challenges and Progress in Marine Debris Remediation Efforts	Regency E



## WELCOME RECEPTION

### NATIONAL AND STATE PERSPECTIVES ON OCEAN POLICY

Sunday, September 17, 6:00 p.m. – 8:00 p.m.

Grand Ballroom, Long Beach Convention Center

Several prominent national and state policy makers will welcome conference attendees and share their perspectives on U.S. and California ocean policy. The welcome speakers are:

**Congressman Sam Farr**, who represents California's Central Coast and is co-chair of the House of Representatives Ocean Caucus

**Congressman Dana Rohrabacher**, who represents the 46th District of California, which includes the City of Long Beach

**Assemblymember Betty Karnette**, who represents the City of Long Beach, and is the only member of the California Legislature whose district includes portions of both the Port of Los Angeles and Port of Long Beach

**Assemblymember Fran Pavley**, who is a representative of the Southern California Coast and chairs the Budget Committee on Resources and the Select Committee on Air and Water Quality

The work these legislators have done with regard to California and the world's ocean give them unique perspectives to share with CWO '06 attendees.

*Ticket includes entrance, light hors d'oeuvres, and wine. Cash bar will be available.*



U.S. Congressman  
Sam Farr



U.S. Congressman  
Dana Rohrabacher



California Assemblymember  
Betty Karnette



California Assemblymember  
Fran Pavley

## OCEAN COMMISSIONS' LUNCHEON

### FROM SEA TO SHINING SEA: PROGRESS ON IMPLEMENTING THE NATIONAL OCEAN COMMISSIONS' RECOMMENDATIONS

Monday, September 18, 12:15 p.m. – 1:45 p.m.

Grand Ballroom, Long Beach Convention Center

Since the Pew Oceans Commission and U.S. Commission on Ocean Policy issued their final reports in 2003 and 2004, California and other coastal states have responded rapidly with state ocean plans to implement their recommendations. President George W. Bush released the U.S. Ocean Action Plan, and several bills have been introduced in Congress. However, many of the major recommendations in the Commissions' reports have not been addressed at the federal level, and renewed focus is needed to implement priority changes. In June 2006, the Joint Ocean Commission Initiative, composed of members of both Commissions, released the report *From Sea to Shining Sea: Priorities for Ocean Policy Reform* to set clear priorities for action. This luncheon, moderated by California Assistant Secretary for Ocean and Coastal Policy Brian Baird, will feature Pew Oceans Commission Chair and Joint Ocean Commission Initiative Co-Chair Leon Panetta and the U.S. Commission on Ocean Policy Executive Director Dr. Thomas

Kitsos. The panel will discuss the nation's progress toward implementing the recommendations of the Commissions' reports and highlight the priorities for moving forward. This session will be webcast live from <http://resources.ca.gov/ocean/cwo06>.

*Ticket includes entrance and lunch.*



Moderator: Assistant Secretary  
for Ocean and Coastal Policy  
Brian Baird



Joint Ocean Commission  
Initiative Co-Chair  
Leon Panetta



U.S. Commission on  
Ocean Policy Executive  
Director Dr. Thomas Kitsos





## OPENING SESSION

### IMPLEMENTING THE VISION FOR OCEAN AND COASTAL PROTECTION

Monday, September 18, 8:15 a.m. – 9:45 a.m.

Grand Ballroom, Long Beach Convention Center

The California Ocean Protection Council and NOAA Administrator Vice Admiral Conrad Lautenbacher will open the conference with their vision on how to improve ocean and coastal protection in California and across the nation. After a welcome to the City of Long Beach from Mayor Bob Foster, Vice Admiral Lautenbacher will describe new developments in national ocean and coastal policy. The California Ocean Protection Council (OPC) members will hold a roundtable discussion regarding their expectations for this unique

conference and their vision for action in implementing their new Five-Year Strategic Plan. The OPC voting members are Secretary for Resources Mike Chrisman, State Controller Steve Westly, and Secretary for Environmental Protection Linda Adams. State Senator Sheila Kuehl (represented at CWO '06 by Bill Craven), and State Assemblymember Pedro Nava serve as ex-officio OPC members. This session will be web cast live from <http://resources.ca.gov/ocean/cwo06>.

*Entrance included with basic registration.*

#### California Ocean Protection Council



Secretary for Resources  
Mike Chrisman



State Controller  
Steve Westly



Secretary for Environmental  
Protection  
Linda Adams



State Senator  
Sheila Kuehl



State Assemblymember  
Pedro Nava

#### NOAA Administrator



Vice Admiral  
Conrad Lautenbacher





## RECEPTION AND POSTER SESSION

### CROSSROADS BETWEEN POLICY, MANAGEMENT, SCIENCE, AND EDUCATION

Monday, September 18, 6:30 p.m. – 8:30 p.m.

Grand Ballroom, Long Beach Convention Center

Participants from around the world have contributed excellent poster presentations addressing a diverse array of ocean issues. This is a prime opportunity to view these posters and converse with the presenters. We have over 75 poster presentations this year, so please

allow enough time to visit these impressive displays. Conference exhibits will also be open during this time.

*Entrance and light refreshments included with basic registration. Cash bar will be available.*



Pescadero State Beach, California

Josh Pederson/MBNMS

## MEDIA PANEL LUNCHEON

### ARE OCEANS ON THE PUBLIC AGENDA?

Tuesday, September 19, 12:15 p.m. – 1:45 p.m.

Grand Ballroom, Long Beach Convention Center

This plenary panel will bring together leading journalists to address whether protecting the ocean is really on the agenda of the public and policy makers. Joining the panel are:

**Terry Rodgers**, a staff writer for the *San Diego Tribune* who focuses on coastal issues and created the regular surf column

**Ken Weiss**, an environmental reporter for the *Los Angeles Times* who traveled the globe to research and write the recent special series, "Altered Oceans"

**Thomas Hayden**, an oceanographer turned science writer who recently wrote the cover story of the August 2006 issue of *National Geographic*

**Moderator: Mike Sutton**, Vice President and Director, Center for the Future of the Oceans, Monterey Bay Aquarium

They will address questions such as: Are oceans on the political radar screen? What challenges do journalists face covering ocean news? How do scientists and conservation practitioners either help or hinder ocean coverage?

Organized by the Communication Partnership for Science and the Sea (COMPASS).

*Ticket includes entrance and lunch.*



Moderator: Mike Sutton



Terry Rodgers



Ken Weiss



Thomas Hayden

## PLENARY EVENTS



## DINNER RECEPTION

## WHY EXPLORE?: A CELEBRATION OF OCEAN EXPLORATION

Tuesday, September 19, 6:30 p.m. – 11:00 p.m.

Aquarium of the Pacific, Long Beach

Hosted by Comedian Bob Sarlatte, this gala reception will feature world-famous ocean explorers Sylvia Earle and Jean-Michel Cousteau showing highlights of their greatest ocean adventures. Join us for this celebration in the beautiful Aquarium of the Pacific. Several behind-the-scenes tours of the Aquarium of the Pacific will be

available 6:30 – 7:00 p.m., and the aquarium exhibits will be open for viewing throughout the evening. The Larry Walker Band featuring Bob Sarlatte and Anna Kristina will play great danceable music and vintage rock and roll for your enjoyment. Come ready to dance and celebrate 200 years of ocean exploration by the United States.

*Ticket includes entrance, dinner, and wine. Cash bar will be available.*



Master of Ceremonies:  
Bob Sarlatte



Sylvia Earle



Jean-Michel Cousteau

## LUNCHEON AND CLOSING SESSION

## LOOKING AHEAD TO A HEALTHY, RESILIENT, AND PRODUCTIVE OCEAN

Wednesday, September 20, 12:15 p.m. – 1:45 p.m.

Beacon Ballroom, Hyatt Regency

California Ocean Protection Council Chair and Secretary for Resources Mike Chrisman will review the key messages that have come forth at the conference. He will describe how these messages were captured at the conference and how they will be used to address the mission of the Ocean Protection Council. Secretary Chrisman's remarks will be followed by a keynote address from Dr. Tony Haymet, the newly appointed Director of Scripps Institution of Oceanography at the University of California, San Diego. In his address, Dr. Haymet will discuss the opportunities arising from California ocean policy and reflect on his experiences in Australia where a Federal Oceans

Policy has been in place for more than five years. Dr. Haymet also serves as University of California San Diego's Vice Chancellor for Marine Sciences, Dean of the Graduate School of Marine Sciences, and Professor of Oceanography. Before joining Scripps, he was the Chief of Marine and Atmospheric Research, then Director of Science and Policy, at Australia's national science agency, the Commonwealth Scientific and Industrial Research Organization, which is one of the largest and most diverse research agencies in the world.

*Ticket includes entrance and lunch.*



Mike Chrisman



Tony Haymet



Point Piños, California

Chad King/MBNMS





## THE WORLD OCEAN AND CALIFORNIA: CRITICAL ISSUES BEYOND STATE BOUNDARIES

### ROOM 204

**Chair:** Kate Wing, Ocean Policy Analyst, Natural Resources Defense Council

**Organizer:** Kristina Gjerde, High Seas Policy Advisor, IUCN, The World Conservation Union

**Biliana Cicin-Sain**, Director, Gerard J. Mangone Center for Marine Policy • *Meeting Global Oceans Goals: Trends and Prospects*

**Sylvia Earle**, Executive Director, Global Marine Division, Conservation International • *The World Ocean and California: What is at Stake?*

**Kristina Gjerde**, High Seas Policy Advisor, IUCN, The World Conservation Union • *Global Oceans Governance: The Next Steps*

**Arlo Hemphill**, Director, Global Marine Strategy, Conservation International • *Linkages Between Open Ocean and Coastal Waters: Implications for Ocean Governance*

**Lance Morgan**, Chief Scientist, Marine Conservation Biology Institute • *Deep Seabed Ecosystems Within and Beyond California Waters*

**Elliott Norse**, President, Marine Conservation Biology Institute, • *Ecosystem-Based Management: Applying Lessons Learned to Areas Beyond National Jurisdiction*



Opalescent Nudibranch (*Hermisenda crassicornis*)

Sonia Orchard

## CALIFORNIA'S OCEAN OBSERVATORIES

### ROOM 203B

**Chair and Organizer:** John Orcutt, Deputy Director, Scripps Institution of Oceanography

**Newell Garfield**, Physical Oceanographer, San Francisco State University, • *California's Coastal Ocean Current Monitoring Program (COCMP)*

**Heather Kerker**, Coordinator, Central California Ocean Observing System (CeNCOOS) • *Collaborative Efforts and Resulting Product Development in the Central and Northern California Ocean Observing System*

**John Largier**, Professor, Bodega Marine Lab, University of California, Davis • *The Bodega Ocean Observing Node (BOON): Coastal Ocean Observations in the Bodega Region*

**Stephanie Peck**, Manager, Policy and Administration, Southern California Coastal Ocean Observing System (SCCOOS), Scripps Institution of Oceanography • *The Southern California Coastal Ocean Observing System: Meeting User Needs at the Regional Level, Integrating at the Federal Level*

**Jonathan Phinney**, Assistant Center Director for Ecosystem Research, NOAA Southwest Fisheries Science Center • *The Pacific Coast Ocean Observing System (PaCOOS): The Developing National Backbone for the California Current*

## VOLUNTEERS MAKING A DIFFERENCE

### ROOM 203A

**Chair:** Deborah Streeter, Director, Upwellings Ministry of Environmental Stewardship

**Organizer:** Dawn Hayes, Education Coordinator, NOAA

**Margo Cowan**, Program Coordinator, Volunteers in Parks Program, California State Parks • *Volunteers Making a Difference in California State Parks*

**Eben Schwartz**, Outreach Manager, California Coastal Commission, • *Connecting Californians to the Coast: The Coastal Cleanup Day and Adopt-A-Beach Programs*

**Shannon Lyday**, Beach Watch Supervisor, Farallones Marine Sanctuary Association • *Beach Watch: Volunteer Shoreline Monitoring Program*

**Dawn Hayes**, Education Coordinator, NOAA • *Volunteers as Partners in Protection*

**Bridget Hoover**, Citizen Watershed Monitoring Network Coordinator, Monterey Bay National Marine Sanctuary • *Real People, Real Science, Real Results*

**Shauna Bingham**, Volunteer and Outreach Coordinator, Channel Islands National Marine Sanctuary • *Building Coastal Stewards with the Channel Islands Naturalist Corps*

**Deborah Streeter**, Director, Upwellings Ministry of Environmental Stewardship • *Religious Congregations as Advocates for Ocean Stewardship: New Constituencies, New Messengers*





## MARINE PROTECTED AREAS: EXPERIENCES FROM AROUND THE WORLD

### ROOM 202B&C

**Chair and Organizer:** Mike Osmond, Senior Program Officer, World Wildlife Fund

**Satie Airame**, Marine Policy Coordinator, Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO), University of California, Santa Barbara • *The Role of Science in Design, Monitoring, and Evaluation of Marine Protected Areas in California*

**Meg Caldwell**, Senior Lecturer, Stanford University • *Marine Protected Areas: Lessons from California's MLPA Blue Ribbon Task Force*

**Jon Day**, Director, Conservation Heritage and Indigenous Partnerships, Great Barrier Reef Marine Park Authority • *The Relative Roles of Science, Public Participation, and Political Support in Ocean Zoning: Lessons from Australia's Great Barrier Reef*

**Sean Hastings**, Resource Protection Coordinator, Channel Islands National Marine Sanctuary • *Successes and Challenges in Designating and Managing the Channel Islands Marine Reserves Network*

**Mark Zegler**, Doctoral Candidate, University of California, Santa Barbara • *Geographic Information System Assessment of Fishery, Tourism, and Marine Protected Area Dynamics on the Border of Belize and Mexico*

## USE AND ABUSE OF BACTERIAL INDICATORS

### ROOM 202A

**Chair:** Mark Gold, Executive Director, Heal the Bay

**James Alamillo**, Urban Programs Manager, Heal the Bay • *Heal the Bay's Beach Report Card: Communicating Complex Water Quality Issues and Improving Public Health*

**Ryan Dwight**, Director, Coastal Water Research Group • *What To Do with the Enterococci Standard?*

**John Griffith**, Marine Microbiologist, Southern California Coastal Water Research Project • *Microbiological Water Quality at Non-Human Impacted Reference Beaches in Southern California During Wet Weather*

**Kenneth Schiff**, Deputy Director, Southern California Coastal Water Research Project • *Water Quality Indicators and the Risk of Illness in Non-Point Source Impacted Recreational Waters*

**David Turbow**, Assistant Professor of Health Sciences, Touro University International • *Web-Based Investigation of Recreational Water Related Illness*

## LARGE-SCALE RESTORATION PROJECTS

### ROOM 201B

**Chair:** Sam Schuchat, Executive Officer, State Coastal Conservancy

**Peter Brand**, Senior Project Manager, State Coastal Conservancy, • *The Santa Clara River Parkway Project: Restoring River Functions on the California Coast*

**Kate Roney Faulkner**, Chief Natural Resources Management, Channel Islands National Park • *No Island Is an Island: Restoring Islands to Protect Marine Ecosystems*

**Tom Ford**, Director, Kelp Restoration and Monitoring Project, Santa Monica Baykeeper • *Santa Monica Bay Needs Your Kelp!*

**Irma Lagomarsino**, Arcata Area Office Supervisor, National Marine Fisheries Service • *National Marine Fisheries Service Restoration Activities in the Klamath Basin*

**Korie Schaeffer**, Team Leader, San Francisco Bay Habitat Conservation Team, NOAA • *San Francisco Bay Subtidal Habitat Goals Project*

**Steve Ritchie**, Executive Project Manager, State Coastal Conservancy, • *The South Bay Salt Pond Restoration Project: Using Adaptive Management to Plan a Multi-Objective Project*

## REBUILDING DEPLETED SPECIES: KEY COMPONENT OF AN ECOSYSTEM-BASED APPROACH

### ROOM 201A

**Chair and Organizer:** Karen Garrison, Co-Director, Ocean Initiative, National Resources Defense Council

#### Panelists for Discussion:

**Margaret Bowman**, Director, Lenfest Ocean Program • *What Is and Isn't Working with U.S. Fisheries Rebuilding Efforts*

**Steven Berkeley**, Fishery Biologist, Long Marine Lab, University of California • *Rebuilding Overfished Groundfish: Do We Have the Right Goals?*

**Selina Heppell**, Assistant Professor, Oregon State University, • *Matching Tools and Research Needs to Management Challenges: Life History, Space, and Rebuilding*

**Stephan Munch**, Assistant Professor, Marine Sciences Research Center • *Dealing with Uncertainty in Rebuilding Science*

**Ussif Rashid Sumaila**, Director, Fisheries Economics Research Unit, Fisheries Research Centre, University of British Columbia, • *Economics of Rebuilding*

**Lisa Suatoni**, Ocean Science Fellow, Natural Resources Defense Council • *Rebuilding Fish Populations: Emerging Science Points to New Approaches*



## WEST COAST REGIONAL COLLABORATION TO ADDRESS OCEAN HEALTH: EXAMINING CHALLENGES AND OPPORTUNITIES

### ROOM 204

**Chair:** Mike Sutton, Director, Center for the Future of the Oceans, Monterey Bay Aquarium

**Organizer:** Craig Russell, Geographer, Residential Site Improvement Standards Inc., NOAA

#### Panelists for Discussion:

**Brian Baird**, Assistant Secretary for Ocean and Coastal Policy, California Resources Agency • *California State Perspective on Regional Collaboration to Address Ocean Health*

**William Douros**, West Coast Regional Superintendent, National Marine Sanctuary Program • *A Federal Perspective on West Coast Regional Collaboration to Address Ocean Health*

**Kathleen Drew**, Governor's Executive Policy Advisor for Sustainable Economic Development, Energy, and Environmental Management, Office of Washington Governor Christine Gregoire • *Washington State Perspective on West Coast Regional Collaboration to Address Ocean Health*

**Jessica Hamilton**, Natural Resources Policy Advisor, Office of Oregon Governor Ted Kulongoski • *Oregon State Perspective on West Coast Regional Collaboration to Address Ocean Health*

**Marc Hershman**, Professor, School of Law and School of Marine Affairs, University of Washington • *Academic Perspective on West Coast Regional Collaboration to Address Ocean Health*

**Robert Malouf**, Director, Oregon Sea Grant Program, Oregon State University • *Oregon Sea Grant Perspective on West Coast Regional Collaboration to Address Ocean Health*



Moss Landing Jetty, California

Josh Pederson/MBNMS

## MANAGEMENT APPLICATIONS OF OCEAN INFRASTRUCTURE AND TECHNOLOGY I

### ROOM 203B

**Chair:** Margaret Davidson, Director, NOAA Coastal Services Center

**Robert Guza**, Professor of Oceanography, Scripps Institution of Oceanography • *Overview of the Huntington Beach 06 Field Experiment*

**Burton Jones**, Research Associate Professor, University of Southern California • *From the Shelf Break to the Surf Zone: The Southern California Coastal Ocean Observing System Nearshore Study of Transport and Dispersion at Huntington Beach, California*

**Walter Nordhausen**, Staff Environmental Scientist, Office of Spill Prevention and Response, California Department of Fish and Game, • *Applications of Coastal Observatories for Tracking the Fate and Effects of Dispersed Oil: A Program for Natural Resource Damage Assessment*

**William O'Reilly**, Senior Development Engineer, Scripps Institution of Oceanography • *California Coastal Wave Predictions from an Observational Network*

**George Robertson**, Senior Scientist, Orange County Sanitation District, • *Co-Operative Regional Water Quality Monitoring Program*

**Eric Terrill**, Director, Coastal Observing Research and Development Center • *Developing Coastal Observatories for Managing Coastal Water Quality and Public Health Risks*

## SUSTAINING BEACHES THROUGH REGIONAL SEDIMENT MANAGEMENT

### ROOM 203A

**Co-Chairs:** Brian Baird, Assistant Secretary for Ocean and Coastal Policy, California Resources Agency

**George Domurat**, U.S. Army Corps of Engineers

**Organizer:** Kim Sterrett, Program Manager, California Department of Boating and Waterways

**Karen Bane**, Project Manager, State Coastal Conservancy, • *Integrating Coastal Wetland Restoration and Maintenance into Regional Sediment Management Plans*

**Reinhard Flick**, Oceanographer, California Department of Boating and Waterways, Scripps Institution of Oceanography • *Beach Width Change Related to Construction of San Onofre Nuclear Generating Station (SONGS), 1964-1985*

**Steve Goldbeck**, Assistant Executive Director, Bay Conservation and Development Commission • *San Francisco Bay Regional Sediment Management*

**Philip King**, Associate Professor, San Francisco State University, • *The Economics of Regional Sediment Management in Maintaining California Beaches*

**Peter Mull**, Project Manager, U.S. Army Corps of Engineers, San Francisco • *Regional Sediment Management: The New Paradigm at Ocean Beach, San Francisco*

**Arthur Shak**, Chief Coastal Engineering, U.S. Army Corps of Engineers, Los Angeles • *70 years of Regional Sediment Management in Los Angeles and Orange Counties*



## LESSONS LEARNED FROM THE CALIFORNIA MARINE LIFE PROTECTION ACT INITIATIVE

### ROOM 202B&C

**Chair and Organizer:** John Kirlin, Executive Director, Marine Life Protection Act Initiative

#### Panelists for Discussion:

**Phillip Isenberg**, Attorney At Law, Isenberg/O'Haren

**John Kirlin**, Executive Director, Marine Life Protection Act Initiative

**J. Michael Harty**, Principal, Harty Conflict Consulting and Mediation

**Michael DeLapa**, Central Coast Project Manager, Marine Life Protection Act Initiative

**Scott McCreary**, Principal and Co-Founder, CONCUR, Inc.

**Melissa Miller-Henson**, Operations/Communications Manager, Marine Life Protection Act Initiative

**John Ugoretz**, Nearshore Ecosystem Coordinator, Marine Region, California Department of Fish and Game

## ENVISIONING A BETTER OCEAN THROUGH A WATERSHED POINT OF VIEW

### ROOM 202A

**Chair:** Celeste Cantu, Executive Director, State Water Resources Control Board

**Organizer:** Beth Jines, Deputy Director, State Water Resources Control Board

**Alfred Wanger**, Deputy Director, Energy, Ocean Resources and Water Quality Division, California Coastal Commission • *From the Headwaters to the Ocean and Back: Understanding the Key to Coastal Resource Protection*

**Celeste Cantu**, Executive Director, State Water Resources Control Board • *Innovative Land Use Planning Tools and Actions for Coastal Watershed Protection*

**Judy Corbett**, Executive Director, Local Government Commission, • *Connecting Smart Growth and Protecting Water Resources: A Local Government Commission Perspective*

**Chi-Wei Lin**, Mayor, City of Trinidad • *Integrated Watershed Management Approach for the Protection of the Areas of Special Biological Significance in Trinidad*

**Jeff Pratt**, Director, The Living Watershed Perspective • *A Treatment and Prevention for Watershed Ills at the Local Government Level*

## ASSESSING THE SUCCESS OF WETLAND RECOVERY INVESTMENTS IN CALIFORNIA

### ROOM 201B

**Chair and Organizer:** Betty Fetscher, Biologist, Southern California Coastal Water Research Project

**Ross Clark**, Environmental Scientist, California Coastal Commission, • *The Central Coast Wetland Working Group: A Regional Partnership to Evaluate the Condition of Central Coast Wetlands*

**Joshua Collins**, Senior Scientist, Wetlands Science Program, San Francisco Estuary Institute • *Life on the Line: The Boundary between Fluvial and Tidal Ecosystems as a Sampling Stratum to Assess Coastal Watershed Health*

**Jeffrey Crooks**, Research Coordinator, Tijuana River National Estuarine Research Reserve • *Monitoring, Research, and Adaptive Management in Coastal Wetlands of San Diego*

**Betty Fetscher**, Biologist, Watershed Department, Southern California Coastal Water Research Project • *Designing an Ambient Monitoring Approach for Intertidal Wetlands*

**Eric Stein**, Principal Scientist, Southern California Coastal Water Research Project • *Development of an Integrated Regional Assessment Program for Southern California Wetlands*

**Drew Talley**, Research Coordinator, San Francisco Bay National Estuarine Research Reserve • *Ecosystem Engineering and Food Web Effects of a Terrestrial Invader on the Coastal Margin*

## IMPROVING FISHERIES MANAGEMENT: RESEARCH AND CASE STUDIES

### ROOM 201A

**Chair:** Gary Stacey, Fisheries Program Manager, California Department of Fish and Game

**M. James Allen**, Principal Scientist, Southern California Coastal Water Research Project • *Temporal Trends in Southern California Coastal Fish Populations Relative to 30-Year Trends in Oceanic and Anthropogenic Conditions*

**Ashley Greenley**, Research Assistant, Moss Landing Marine Labs, • *Relationships Between Diver and Commercial Fishing Gear Surveys of Nearshore Fishes*

**Jim Marshall**, Commercial Fisherman, California Abalone Association, • *A Limited Fishery for Red Abalone at San Miguel Island*

**Daniel Pondella**, Assistant Professor, Occidental College • *Can We Save the Big Fish?: An Analysis of the Gill Net Ban (Proposition 132)*

**Martina Koller**, Passage Data Specialist, Pacific States Marine Fisheries Commission • *The Passage Assessment Database: A Tool for Stream Habitat Connectivity Restoration via the Publicly Available CalFish Website*





## FEDERAL AND STATE ROLES IN REGIONAL GOVERNANCE: ALEXANDER HAMILTON, RONALD REAGAN, AND THE OCEAN

### ROOM 204

**Chair and Organizer:** Katherine Andrews, Executive Director, Coastal States Organization

**Sarah Chasis**, Senior Attorney, Natural Resources Defense Council,  
• *Should There be Federal or State Leadership in Regional Agreements*

**Jack Dunnigan**, Assistant Administrator, NOAA Ocean Service,  
• *Regional Ocean Governance: Federal and State Roles*

**Gerhard Kuska**, Director of Ocean and Coastal Policy, White House Council on Environmental Quality • *Coordinating Management Efforts to Make our Oceans, Coasts, and Great Lakes Cleaner, Healthier and More Productive: Federal Perspectives under the U.S. Action Plan*

**Tony MacDonald**, Director, Urban Coast Institute • *Regional Ocean Governance: Federal and State Roles*

**Susan Snow-Cotter**, Director, Massachusetts Office of Coastal Zone Management • *A State Perspective on Asserting Interests Beyond State Waters*

## MANAGEMENT APPLICATIONS OF OCEAN INFRASTRUCTURE AND TECHNOLOGY II

### ROOM 203B

**Chair:** Paul Siri, Director, California Ocean Science Applications Program

**Sarah G. Allen**, Science Advisor, National Park Service • *Ocean Stewardship through Marine Monitoring at Point Reyes National Seashore*

**Franklin Schwing**, Oceanographer, Southwest Fisheries Science Center, NOAA National Marine Fisheries Service • *Integrated Multi-Sensor Satellite Habitat Maps for Coastal Management*

**Jeffrey Paduan**, Associate Professor of Oceanography, Naval Postgraduate School • *Short Term Drifting Particle Forecasts Using Ocean Surface Current Mapping Data from California Ocean Currents Monitoring Program*

**William Sydeman**, Director, Conservation Science, Point Reyes Bird Observatory • *Top Predators as Indicators for Fisheries and Habitat Conservation in the California Current*

**John Largier**, Professor, Bodega Marine Lab, University of California, Davis • *Environmental Indicators for Ecosystem-Based Management in the California Current System*

**Libe Washburn**, Professor, Institute for Computational Earth System Science, Department of Geography, University of California, Santa Barbara • *A California Coastal Observing System for Marine Ecosystem Studies: A Multi-Agency Partnership on the South-Central Coast*

## REGIONAL APPROACHES TO SHORELINE EROSION AND MANAGEMENT: CENTRAL CALIFORNIA EXAMPLES

### ROOM 203A

**Chair:** Les Strnad, Coastal Steward

**Organizer:** Lesley Ewing, Senior Coastal Engineer, California Coastal Commission

**Ed Thornton**, Professor, Naval Postgraduate School • *Shoreline Change in Southern Monterey Bay*

**David Revell**, Doctoral Candidate, University of California, Santa Cruz,  
• *Historic Beach Changes and Storm Event Responses along Santa Barbara and Ventura Counties, California*

**Brad Damitz**, Environmental Policy Specialist, Monterey Bay National Marine Sanctuary • *A Regional, Multi-Stakeholder Approach to Addressing Shoreline Erosion in Southern Monterey Bay*

**Lesley Ewing**, Senior Coastal Engineer, California Coastal Commission,  
• *The Coastal Management Framework for Shoreline Planning*

**Ricardo Pineda**, Floodplain Management Branch Chief, California Department of Water Resources • *Implementing No Adverse Impact (NAI) Concepts in California's Coastal Zone*

## SCIENTIFIC PERSPECTIVES ON THE CALIFORNIA MARINE LIFE PROTECTION ACT INITIATIVE

### ROOM 202B&C

**Chair:** Steve Gaines, Professor, Marine Science Institute, University of California, Santa Barbara

**Organizer:** Mary Gleason, Marine Conservation Planner, Marine Life Protection Act Initiative, The Nature Conservancy

**Louis Botsford**, Professor, University of California, Davis • *New Directions for the Science of Marine Protected Areas*

**Mark Carr**, Associate Professor, University of California, Santa Cruz,  
• *Evaluating Alternative Marine Protected Area Network Designs*

**Steven Gaines**, Professor, Marine Science Institute • *How to Design an Ecological Marine Protected Area Network*

**Mary Gleason**, Senior Conservation Planner, The Nature Conservancy,  
• *A Decision Support System for Stakeholders, Scientists, and Policy-Makers in the Marine Protected Area Planning Process*

**John Kirlin**, Executive Director, Marine Life Protection Act Initiative,  
• *Incorporating Science into Science-Based Management: The Marine Life Protection Act Initiative*

**Astrid Scholz**, Vice President, Knowledge Systems, Ecotrust • *The Role of Socioeconomic Data in Designing and Evaluating Marine Protected Area Networks*





## CALIFORNIA'S COASTAL NON-POINT SOURCE POLLUTION PROGRAM

### ROOM 202A

**Chair:** Jack Gregg, Coastal Nonpoint Source Supervisor, California Coastal Commission

#### Panelists for Discussion:

**Jack Gregg**, Coastal Nonpoint Source Supervisor, California Coastal Commission

**Pedro Nava**, Assemblymember, California State Assembly

**Rainer Hoenicke**, Deputy Director, San Francisco Estuary Institute

**Val Connor**, Surface Water Ambient Monitoring Program Coordinator, State Water Resources Control Board

**Karen Worcester**, Staff Environmental Scientist, Central Coast Water Board

**Peter Douglas**, Executive Director, California Coastal Commission



Santa Rosa Island, California

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## DEVELOPMENT OF A NATIONAL OCEAN RESEARCH PRIORITIES PLAN AND IMPLEMENTATION STRATEGY

### ROOM 201B

**Chair:** Dan Walker, Senior Policy Analyst, White House Office of Science and Technology Policy

#### Panelists for Discussion:

**Dan Walker**, Senior Policy Analyst, White House Office of Science and Technology Policy

**John Orcutt**, Deputy Director for Research, Scripps Institution of Oceanography

**Marcia McNutt**, President and CEO, Monterey Bay Aquarium Research Institute

**Stephen Weisberg**, Executive Director, Southern California Coastal Water Research Project

**Robert Knox**, Associate Director, Ship Operations and Technical Support, Scripps Institution of Oceanography

**Brian Baird**, Assistant Secretary for Ocean and Coastal Policy, California Resources Agency

## ECOSYSTEM-BASED FISHERIES MANAGEMENT

### ROOM 201A

**Chair:** Mike Weber, Program Officer, Oceans, Coasts, and Fisheries, Resources Legacy Fund Foundation

**Stephen Capps**, Senior Policy Analyst, NOAA Fisheries Northwest Region • *Emerging Roles for Fishers, NGOs, Federal, and State Governments in Ecosystem Management off the U.S. West Coast*

**Hunter Lenihan**, Assistant Professor, Bren School of Environmental Science and Management, University of California, Santa Barbara, • *Collaborative Fishery Research and Co-Management for the California Spiny Lobster*

**Santi Roberts**, California Project Manager, Oceana, • *Recommendations towards Ecosystem-Based Fisheries Management of the California Current Large Marine Ecosystem*

**Cynthia Thomson**, Economics Team Leader, NOAA National Marine Fisheries Service • *Ecosystem-Based Fishery Management: From Principles to Application*



## COASTAL ZONE MANAGEMENT: PAST, PRESENT, AND FUTURE

### ROOM 204

**Chair:** **Ralph Cantral**, Chief of National Policy and Evaluation Division, NOAA Office of Ocean and Coastal Resource Management  
**Organizer:** **Katherine Andrews**, Executive Director, Coastal States Organization

**Ralph Cantral**, Chief of National Policy and Evaluation Division, NOAA Office of Ocean and Coastal Resource Management • *The History of the Coastal Zone Management Act and How We Got a National System of Coastal Management*

**Phillip Hinesley**, Chief Coastal Section, State of Alabama • *The Current State of Coastal Management*

**Mel Nutter**, Former Chair, California Coastal Commission • *California's Early Experiences with Coastal Management*

**Peter Douglas**, Executive Director, California Coastal Commission, • *Coastal Management: Still Challenging, and Never Finished*

**Jack Dunnigan**, Assistant Administrator, NOAA • *The Future of Coastal Management*

## THE EDUCATION AND THE ENVIRONMENT INITIATIVE

### ROOM 203B

**Chair and Organizer:** **Andrea Lewis**, Assistant Secretary, California Environmental Protection Agency

#### Panelists for Discussion:

**Francesca Cava**, Ocean Literacy Program Manager, National Geographic Society

**Andrea Lewis**, Assistant Secretary, California Environmental Protection Agency

**Gerald Lieberman**, Director, State Education and Environment Roundtable

**Leslie Mintz**, Legislative Director, Heal the Bay

**Jennifer Rigby**, Director, The Acorn Group

**Susan Sakakihara**, Acting Assistant Director, California Integrated Waste Management Board

**Sue Stickel**, Deputy Superintendent, Curriculum and Instruction Branch, California Department of Education

## SHORELINE AND BEACH MANAGEMENT

### ROOM 203A

**Chair:** **Reinhard Flick**, Oceanographer, California Department of Boating and Waterways, Scripps Institution of Oceanography

**Steve Aceti**, Executive Director, California Coastal Coalition • *The Need for California to Increase its Investment in Beach Restoration*

**Ed Andrews**, Committee Member, Carlsbad Beach Preservation Committee • *Beach Management, Whose Responsibility Is It?: An Assessment of Beach Management in North San Diego County*

**Brian Brennan**, Executive Director, Beach Erosion Authority for Control, Operations and Nourishment (BEACON) • *Regional Approaches to Shoreline Erosion and Management*

**Gary Griggs**, Director, Institute of Marine Sciences • *Considerations for Beach Nourishment in California*

**Scott Grove**, Student, Sonora High School • *Physical Properties of Southern California Beaches and People's Preferences: Considerations for Beach Nourishment Planning*

**Orville Magoon**, President, Coastal Zone Foundation • *World's Most Successful Beach Nourishment Project*

## OCEAN ZONING: EXAMPLES OF ECOSYSTEM-BASED GOVERNANCE

### ROOM 202B&C

**Chair and Organizer:** **Gail Osherenko**, Research Scientist, Marine Science Institute, University of California, Santa Barbara

**Jon Day**, Director, Conservation Heritage and Indigenous Partnerships, Great Barrier Reef Marine Park Authority • *Spatial and Temporal Ocean Planning and Management, Lessons Learned After 25 Years of Managing the World's Most Complex Marine Ecosystem*

**Josh Eagle**, Assistant Professor, University of South Carolina School of Law • *Ocean Zoning: Legislative and Administrative Responsibilities*

**Charles Ehler**, Consultant, Intergovernmental Oceanographic Commission, Man and the Biosphere Programme • *Essential Elements of Sea Use Management: Lessons Learned from International Marine Spatial Planning and Ocean Zoning Practice*

**Elliott Norse**, President, Marine Conservation Biology Institute, • *Zoning the "Last Frontier": From Concept to Practice*

**Gail Osherenko**, Research Scientist, University of California, Santa Barbara • *Why Governance Matters: Diagnosis of the Problem*

**Robbin Peach**, Executive Director, Massachusetts Environmental Trust • *An Ecosystem Approach: More than Good Management, Marketing, and Money*

**Susan Snow-Cotter**, Director, Massachusetts Coastal Zone Management • *Toward Comprehensive, State-Wide Ocean Planning in Massachusetts*



## TECHNOLOGIES FOR MONITORING BACTERIA IN RECREATIONAL WATER

### ROOM 202A

**Chair and Organizer:** **Shakoora Azimi-Gaylon**, Environmental Scientist, California State Water Resources Control Board

**Shakoora Azimi-Gaylon**, Environmental Scientist, California State Water Resources Control Board • *Why Are New Technologies Needed for Monitoring Bacteria Indicators?*

**John Griffith**, Marine Microbiologist, Southern California Coastal Water Research Project • *Rapid Methods for Measuring Microbiological Quality of Recreational Water*

**Rachel T. Noble**, Assistant Professor, University of North Carolina, • *Comparing Routine Methods for Assessment of Recreational Water*

**Linwood Pendleton**, Associate Professor, Department of Environmental Health Sciences, University of California, Los Angeles • *Regional Public Health Cost Estimates of Contaminated Coastal Waters: A Case Study of Gastroenteritis at Southern California Beaches*

**Jill Stewart-Pullaro**, Microbiologist, NOAA • *Pathogen Source Tracking in South Carolina*

## THE NATION'S MARITIME INDUSTRIES: A GLORIOUS PAST, AN UNCERTAIN FUTURE

### ROOM 201B

**Co-Chairs:** **Jerry Schubel**, President and CEO, Aquarium of the Pacific  
**Dr. Mike Walter**, Board of Harbor Commissioners, Port of Long Beach

**Organizer:** **Jerry Schubel**, President and CEO, Aquarium of the Pacific

**Norman Fassler-Katz**, Senior Consultant, California Senate Transportation Sub-Committee on California Ports and Goods Movement • *Ensuring the Future of California's Maritime Industries*

**Judith Kildow**, Professor, California State University, Monterey Bay, • *The Coastal Tourism and Recreation Industry: Need for Managed Growth*

**Geraldine Knatz**, Executive Director, Port of Los Angeles • *Coastal Ports and Terminal Operations*

**Keith Michel**, President, Herbert Engineering Corporation, • *Commercial Ocean Shipping*

**Patrick O'Connor**, Executive Director, Exploration and Production Technology Group, BP America Inc. • *Offshore Oil and Gas Production: The New Era*

**Richard Seymour**, President, Ocean Engineering Group, Scripps Institution of Oceanography • *Offshore Resource Development: Wind, Wave, and Tide Energy*

## THE HUMAN DIMENSION OF FISHERIES MANAGEMENT

### ROOM 201A

**Co-Chairs:** **Caroline Pomeroy**, Marine Advisor, California Sea Grant Extension Program

**Cynthia Thomson**, Economics Team Leader, NOAA Fisheries

**Organizer:** **Caroline Pomeroy**, Marine Advisor, California Sea Grant Extension Program

**Robert Atanasio**, California State Sea Grant Fellow, National Marine Protected Area Center • *Human Use Patterns and Intensity: The Distribution of Human Activities in the Marine Environment*

**Carolynn Culver**, Marine Advisor, University of California Sea Grant Extension • *Sustainable Fisheries: Managers, Fishery Participants, and Scientists Working Collaboratively Toward a Common Goal*

**Michael Dalton**, Assistant Professor, California State University, Monterey Bay • *Measuring Impacts on Fishing Communities: A Framework for Integrated Socioeconomic Assessment*

**Caroline Pomeroy**, Marine Advisor, California Sea Grant Extension Program • *Integrating Social Science Information into California's Fishery Management Plans to Achieve Sustainable Fisheries: What's Worked, What Hasn't, and What Might*

**Stephen Schroeter**, Research Ecologist, University of California, Santa Barbara • *The Role of Collaborative Data Collection for Fishery Management: Lessons Learned from a Long-Term Study of Settlement of Red Sea Urchins in California*



Copper Rockfish (*Sebastes caurinus*)

Chad King/MBNMS





## STATE AND FEDERAL PARTNERSHIPS IN COASTAL MANAGEMENT

### ROOM 204

**Chair and Organizer:** William Douros, West Coast Regional Superintendent, National Marine Sanctuary Program

**John Ugoretz**, Nearshore Ecosystem/Marine Life Protection Act Coordinator, California Department of Fish and Game • *California's National Marine Sanctuaries as Partners in Designing and Managing Marine Protected Areas in State Waters*

**Scott Kathey**, Federal Regulatory and Emergency Response Coordinator, Monterey Bay National Marine Sanctuary • *Marine Enforcement: Crossing Federal/State Lines in National Marine Sanctuaries*

**Jaime Kooser**, Manager, San Francisco Bay National Estuarine Research Reserve • *The Formal Model of State-Federal Partnerships: The National Estuarine Research Reserves*

**Gary Davis**, Visiting Chief Scientist, Ocean Programs, U.S. National Park Service • *Ocean National Parks Seek Stewardship Partnerships in California*

**Paul Michel**, Chief, Southwest/Border Office, U.S. Environmental Protection Agency • *Tapping Federal Resources and Services through the Coastal America Partnership*

**Rebecca Roth**, Federal Programs Manager, California Coastal Commission • *What More Is Needed to Manage California's Ocean*

## OCEAN EDUCATION AND OUTREACH PROGRAMS FOR ALL CALIFORNIANS

### ROOM 203B

**Chair and Organizer:** Linda Duguay, Director, University of Southern California Sea Grant Program

**Linda Chilton**, Education Specialist • *Cabrillo Marine Aquarium, Cabrillo Marine Aquarium's Los Angeles Ocean Learning Experiences*

**Amy Coppenger**, Director of Education, Aquarium of the Pacific, • *Cesar Chavez Elementary and the Aquarium of the Pacific: Combining the Best of Formal and Informal Education*

**Linda Duguay**, Director, University of Southern California Sea Grant Program • *Centers for Ocean Science Excellence in Education (COSEE): A National and Regional Model for Engaging Ocean Scientists and Educator in Collaborative Activities*

**Sarah Wilson**, Research and Education Coordinator, The Ocean Institute, • *SeaTech: After School Teens Hooked on Ocean Technology*

**Lynn Whitley**, Education Coordinator, University of Southern California Sea Grant Program • *Extending Marine Science Education to the Community through the University of Southern California Sea Grant Parent Child Education Program*

**Sabrina Drill**, Natural Resources Advisor, University of California Cooperative Extension • *Environmental Literacy among Recent Immigrants*

**Dan Haifley**, Executive Director, O'Neill Sea Odyssey • *Tomorrow's Ocean Stewards*

## MAPPING BEACH AND COASTAL BLUFF EROSION IN CALIFORNIA

### ROOM 203A

**Chair and Organizer:** Mark Johnsson, Staff Geologist, California Coastal Commission

**Jennifer Dare**, Remote Sensing Outreach Coordinator, NOAA Coastal Services Center • *The California Coastal Armor and Bluff Erosion Database*

**Cheryl Hapke**, Coastal Geologist, Patuxent Wildlife Research Center, U.S. Geological Survey • *Long-Term Coastal Cliff Retreat in California: A Systematic Analysis*

**Adam Young**, Ph.D. Candidate, University of California, San Diego, • *Evaluation of Seacliff Erosion Protection Using Airborne LIDAR and GIS Spatial Analysis*

**Marissa Yates**, Graduate Student, Scripps Institution of Oceanography • *Seasonal Sand Level and Wave Energy Variability on Southern California Beaches*

**Dave Reid**, Coastal Geologist, U.S. Geological Survey • *Regional Shoreline Change Trends along California's Beaches*

**Ed Thornton**, Professor, U.S. Geological Survey • *The Effects of Sand Mining on Erosion Rates of Southern Monterey Bay*

## IMPROVING COORDINATION AND COLLABORATION TO ADVANCE ECOSYSTEM-BASED MANAGEMENT

### ROOM 202B&C

**Chair:** Amber Mace, Knauss Sea Grant Fellow, Senate Commerce Committee

**Jennifer Martin**, Program Manager, California Current Joint Venture, • *A California Current Joint Venture*

**Sarah Fischer**, Pacific Regional Coordinator, NOAA National Marine Protected Area Center • *Marine Protected Area Science, Assessment, and Analysis: A Coordinated Effort on the US West Coast*

**Cope Willis**, Senior Technical Spatial Analyst, NOAA Coastal Services Center • *Linking Land and Sea: Northern California Coastal Conservation Needs Assessment*

**Jacqueline Alder**, Research Associate, Fisheries Centre, University of British Columbia • *Including Humans in the Conservation Equation*

**Michael Beck**, Senior Scientist, The Nature Conservancy, University of California, Santa Cruz • *Conservation Leasing and Ownership of Marine Resources: New Tools for Conservation from Kelp Beds to Shellfish Reefs*

**Julia Ekstrom**, Graduate Student, University of California, Santa Barbara • *Evaluating Current Ocean Management Systems to Facilitate the Development of Ecosystem-Based Management*





## AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS): CALIFORNIA'S 34 STATE WATER QUALITY PROTECTION AREAS

### ROOM 202A

**Chair:** Dominic Gregorio, Chief Ocean Unit, State Water Resources Control Board

**Organizer:** Constance Anderson, Environmental Scientist, Ocean Unit, State Water Resources Control Board

**Constance Anderson**, Environmental Scientist, Ocean Unit, State Water Resources Control Board • *Areas of Special Biological Significance: California's 34 State Water Quality Protection Areas*

**Meleah Ashford**, Water Resources Engineer, Ashford Engineering, • *The ABC's of ASBS Stewardship*

**Michelle Mehta**, Staff Council, Natural Resources Defense Council, • *Aqua Gems: California's 34 Areas of Special Biological Significance*

**Robert Stein**, Principal Engineer, City of Newport Beach • *Protection and Restoration of the Robert E. Badham ASBS: Implementing the Goals of the Ocean Protection Council Strategic Plan at Little Corona*

**Pete Raimondi**, Professor, Department of Ecology and Evolutionary Biology, University of California, Santa Cruz • *Monitoring and Distinguishing Changes and Ecosystem Dynamics from Pollution Impacts in Rocky Intertidal Ecosystems*

**Jack Gregg**, Water Quality Unit Manager, California Coastal Commission, • *Critical Coastal Areas/ASBS Interface the Stakeholder's Challenge*

## COMMERCIAL FISHING AND CALIFORNIA'S FISHING HERITAGE HARBORS: THE CURRENT ISSUES AND DO THEY HAVE A FUTURE IN CALIFORNIA

### ROOM 201A

**Chair:** Caroline Pomeroy, Marine Advisor, California Sea Grant Extension Program

**Organizers:** Rick Algert, Harbor Director, City of Morro Bay  
Steve Schieblauer, Harbormaster, City of Monterey

### Panelists for Discussion:

**Vanessa DeLuca**, President, State Fish Company • *California's Wetfish Industry: Its Importance, Past, Present, and Future*

**Rod Fujita**, Senior Scientist, Environmental Defense • *The Proposed California Fisheries Fund*

**Zeke Grader**, Executive Director, Pacific Coast Federation of Fishermen's Association • *The Pacific Coast Federation of Fishermen's Association Perspective*

**Dave Hull**, Chief Executive Officer, Humboldt Bay Harbor, Recreation, and Conservation District • *Assets Worth Protecting*

**Oscar Pena**, General Manager, Ventura Port District • *Reinvesting in the Infrastructure of Commercial Fishing*

**Janice Peters**, Mayor, City of Morro Bay • *Current Issues in Commercial Fishing and Commercial Fishing Heritage Harbors: Do They Have a Future in California?*

## REDUCING ENVIRONMENTAL IMPACTS OF ENERGY PRODUCTION AND INDUSTRY

### ROOM 201B

**Chair:** Fred Piltz, Senior Environmental Scientist, Minerals Management Service

**Maureen Bornholdt**, Program Manager, Minerals Management Service • *Renewable Energy and Alternate Use on the Federal Outer Continental Shelf: A New Program under the Authority of the Minerals Management Service*

**Karen Hansen**, Director, Beveridge and Diamond • *New Rules for Development of Ocean Resources*

**Gregory McMurray**, Marine Affairs Coordinator, Oregon Department Land Conservation and Development • *Ocean Wave Energy Facility Regulation: Integrated Management or Permitting Nightmare?*

**Sarah Abramson**, Staff Scientist, Heal the Bay • *Will New Regulations Under Clean Water Act 316(b) Effectively Protect our Coastal Environment from Ongoing Damage Caused by Coastal Power Plants?: A Case Study in Santa Monica Bay*

**Lara Ferry-Graham**, Water Intake Structure Environmental Research (WISER) Program Manager, Moss Landing Marine Laboratories, • *Evaluating the Ecological Effects of Once-Through Cooling: Contributions of the WISER Program*



Moss Landing Harbor, California

Becky Stamski/MBNMS



## MANAGEMENT PLANS FOR CALIFORNIA'S NATIONAL MARINE SANCTUARIES: A BLUEPRINT FOR THE FUTURE

### ROOM 204

**Chair:** Dan Basta, Director, NOAA National Marine Sanctuaries

**Organizer:** Holly Price, Acting Superintendent, Monterey Bay National Marine Sanctuary

**Maria Brown**, Superintendent, Gulf of the Farallones National Marine Sanctuary • *Gulf of the Farallones National Marine Sanctuary: Navigating the Future*

**Daniel Howard**, Superintendent, Cordell Bank National Marine Sanctuary • *Hard Bottoms, Soft Bottoms, and the Conservation Science Plan at Cordell Bank National Marine Sanctuary*

**Chris Mobley**, Superintendent, Channel Islands National Marine Sanctuary • *Charting a New Course for the Channel Islands National Marine Sanctuary*

**Holly Price**, Acting Superintendent, Monterey Bay National Marine Sanctuary • *New Approaches for a Complex Coastal Ecosystem: A Long-Term Management Plan for the Monterey Bay National Marine Sanctuary*

## OCEAN LITERACY: INFORMAL EDUCATION THROUGH THE CALIFORNIA AQUARIUM COLLABORATIVE AND FORMAL EDUCATION IN K-12

### ROOM 203B

**Chair and Organizer:** Jerry Schubel, President and CEO, Aquarium of the Pacific

#### Panelists for Discussion:

**Christopher Andrews**, Director, Steinhart Aquarium

**Nigella Hilgarth**, Executive Director, Birch Aquarium, Scripps Institution of Oceanography

**Mike Schaadt**, Acting Director, Cabrillo Marine Aquarium

**Jerry Schubel**, President and CEO, Aquarium of the Pacific

#### Presentations:

**Rita Bell**, Education Programs Manager, Monterey Bay Aquarium, • *Developing a "Scope and Sequence" for Ocean Literacy*

**Francesca Cava**, Ocean Literacy Project Manager, National Geographic Society • *The Need for Ocean Literacy in the Classroom*

## IMPLICATIONS OF A RISING SEA LEVEL FOR CALIFORNIA

### ROOM 203A

**Chair and Organizer:** Lesley Ewing, Senior Coastal Engineer, California Coastal Commission

**Peter Bromirski**, Assistant Project Scientist, Scripps Institution of Oceanography • *Projecting California Coastal Climate and Sea Level Changes*

**Lesley Ewing**, Senior Coastal Engineer, California Coastal Commission, • *Implications for California's Open Ocean Coast from Accelerated Sea Level Rise*

**Reinhard Flick**, Oceanographer, California Department of Boating and Waterways, Scripps Institution of Oceanography • *Projected Sea Level Rise and the Beaches of California*

**Leslie Lacko**, Coastal Planner, San Francisco Bay Conservation and Development Commission • *Planning for Sea Level Rise in San Francisco Bay*

**Susanne Moser**, Research Scientist, National Center for Atmospheric Research • *Adapting to the Impacts of Climate Change: How Ready Is Coastal California?*

## ADVANCEMENTS IN ECOSYSTEM-BASED MANAGEMENT

### ROOM 202B&C

**Chair:** Leah Akins, Ocean and Coastal Policy Analyst, California Resources Agency

**John Ogden**, Director and Professor, Florida Institute of Oceanography • *Ecosystem Approaches to Management and Governance of Florida's Coastal Ocean*

**Emily Menashes**, Deputy Goal Lead, NOAA Ecosystem Goal Team, • *NOAA's Ecosystem Approach to Management*

**Fanny Douvère**, Consultant, Man and the Biosphere, United Nations Educational, Scientific, and Cultural Organization • *European Perspective on Ecosystem-Based Management: New Approaches to Ocean Zoning and Governance*

**William Burns**, Senior Fellow, International Environmental Law, Santa Clara University Law School • *Operationalizing the Precautionary Principle in California Oceans Policy*

**Carl Nettleton**, Founding Executive Director, San Diego Oceans Foundation • *A Collaborative Three-Legged Stool to Balance Ocean Investigations, Decisions, and Public Understanding*

**Sarah Abramson**, Masters Graduate, University of California, Santa Barbara • *Advancements in Marine Ecosystem-Based Management: From Characterization to Implementation*



## HARMFUL ALGAL BLOOMS: ECOSYSTEM PROCESSES AND HUMAN HEALTH RISK

### ROOM 202A

**Chair:** David Caron, Professor, University of Southern California

**Gregg Langlois**, Senior Environmental Scientist, California Department of Health Services • *Marine Biotoxins in California: A Statewide Perspective*

**David Caron**, Professor, University of Southern California • *Pseudo-nitzschia and Domoic Acid in the San Pedro Bay: Anatomy of a Recent Harmful Algal Bloom.*

**Raphael Kudela**, Associate Professor of Ocean Science, University of California, Santa Cruz • *A Role for Anthropogenically Derived Nitrogen in the Formation of Harmful Algal Blooms Along the U.S. West Coast*

**Veronica Vigilant**, Graduate Student, University of California, Santa Cruz • *Patterns of Domoic Acid-Producing Diatoms, Pseudo-nitzschia, in Waters and Food Webs of Central California (Monterey Bay)*

**Lilian Busse**, Associate Specialist, Scripps Institution of Oceanography • *Harmful Algal Bloom Monitoring as Part of the Southern California Coastal Ocean Observing System*



Abalone Farm, Cayucos, California

The Abalone Farm, Inc.

## OCEAN WATER DESALINATION IN CALIFORNIA: NEEDS VERSUS WANTS

### ROOM 201B

**Chair:** Jerry Johns, Deputy Director, California Department of Water Resources

**Organizer:** Fawzi Karajeh, Chief Water Recycling and Desalination Branch, California Department of Water Resources

#### Panelists for Discussion:

**Joe Geever**, California Regional Manager, Surfrider Foundation

**Paul Helliker**, General Manager, Marin Municipal Water District

**Tom Luster**, Analyst, California Coastal Commission

**Jonas Minton**, Water Policy Advisor, Planning and Conservation League

**Paul Shoenberger**, Assistant General Manager, West Basin Municipal Water District

## GOT AQUACULTURE? WHY NOT?

### ROOM 201A

**Chair and Organizer:** Dennis Hedgecock, Professor, University of Southern California

**John Marra**, Doherty Senior Scholar, Lamont-Doherty Earth Observatory • *When Will We Tame the Ocean?*

**Anthony Michaels**, Director, University of Southern California, • *Aquaculture and Ocean Ecosystems*

**Charles Santerre**, Professor of Food Toxicology, Purdue University, • *The Safety and Nutritional Benefits of Farmed Fish*

**Dale Kiefer**, Professor, University of Southern California • *A Fish Farm Information System for Analyzing Operations and Environmental Impacts*

**Charles Yarish**, Professor, Department of Ecology and Evolutionary Biology, University of Connecticut • *The Use of Economically and Ecologically Important Seaweeds in Integrated Multi-Trophic Aquaculture: A Guide for Sustainable Development of Marine Farms in the 21st Century*

**Tim Eichenberg**, Director, Pacific Regional Office, The Ocean Conservancy • *Why Strong Standards are Needed for Ocean Fish Farming in California*



**CALIFORNIA INVASIVE SPECIES MANAGEMENT****ROOM 204**

**Chair:** Susan Ellis, Invasive Species Coordinator, California Department of Fish and Game

**Jodi Cassell**, Marine Advisor, University of California Cooperative Extension Sea Grant • *The West Coast Ballast Outreach Project: Coordinating Ballast Water Information Exchange*

**Maurya Falkner**, California Marine Invasive Species Program Manager, California State Lands Commission • *Directing Policy Development: California's Marine Invasive Species Program*

**Jamie Gonzalez**, Program Representative, California Sea Grant Extension Program • *Resolving Coastal Water Quality Protection and Invasive Species Prevention Issues*

**Steve Lonhart**, Senior Scientist, Monterey Bay National Marine Sanctuary • *Management of the Invasive Asian Kelp Undaria pinnatifida at its Current Northern Range Limit in Central California*

**Karen McDowell**, Environmental Planner, San Francisco Estuary Project • *California Aquatic Invasive Species Management Plan*

**Michael Sowby**, Environmental Program Manager, California Department of Fish and Game • *Survey of the Non-Indigenous Species Occurring Within the Coastal Waters of California*

**CREATING A PUBLIC OCEAN AWARENESS CAMPAIGN****RM 203B**

**Co-Chairs and Organizers:** Columbine Culberg, Ocean Etiquette Coordinator, NOAA National Marine Sanctuary Program  
Rebecca Pollock, Project Manager, California State Coastal Conservancy, NOAA Coastal Services Center

**Panelists for Discussion:**

**Maria Brown**, Superintendent, Gulf of the Farallones National Marine Sanctuary

**Michael Hanrahan**, President, The Ocean Channel, Inc.

**Sarah Marquis**, West Coast/Pacific Media Coordinator, NOAA National Marine Sanctuary Program

**Tim Zimmerman**, Marine Science Communications Specialist, University of California, Berkeley

**Scott Mullins**, The Hive Advertising Agency

**COASTAL HAZARDS AND PROTECTION****ROOM 203A**

**Chair:** Gary Griggs, Director, Institute of Marine Science, University of California, Santa Cruz

**Bob Battalio**, Principal, Philip Williams and Associates, Ltd. • *Coastal Morphology and Hazard Studies in Support of Coastal Zone Management*

**Richard Eisner**, Regional Administrator, Governor's Office of Emergency Services • *California Tsunami Hazards: Science, Policy, and Management*

**Gary Griggs**, Director, Institute of Marine Sciences, University of California, Santa Cruz • *Regional Approaches to Coastal Protection*

**Heather Schlosser**, Coastal Study Manager, U.S. Army Corps of Engineers • *Multi-Purpose Submerged Reef at Oil Piers in Ventura County: California for the National Erosion Control Development and Demonstration Program (Section 227)*

**Nathaniel Scholz**, Research Zoologist, NOAA Fisheries • *Assessing the Ecological Impacts of Storms*

**Stephen Sellers**, Regional Administrator, Governor's Office of Emergency Services • *Coastal Storms and Human Safety*

**LOCAL AND REGIONAL PERSPECTIVES ON IMPLEMENTING MARINE ECOSYSTEM-BASED MANAGEMENT****ROOM 202B&C**

**Chair and Organizer:** Dean Wendt, Assistant Professor, Cal Poly San Luis Obispo

**Richard Cudney-Bueno**, Director, Project PANGAS, School of Natural Resources, University of Arizona • *Project PANGAS: Implementing Ecosystem-Based Management of Small-Scale Fisheries the Northern Gulf of California, Mexico*

**Kit Rawson**, Chair, San Juan Marine Resources Committee • *The San Juan County Marine Stewardship Area: An Ecosystem-Based Management Plan for an Archipelago*

**Susan Schlosser**, Marine Advisor, University of California Sea Grant Program • *A Community-Based Approach to Coastal Resource Management in the Humboldt Bay Ecosystem*

**Barbara Peichel**, Tidal Wetland Project Coordinator, Elkhorn Slough National Estuarine Research Reserve • *Ecosystem-Based Management in Elkhorn Slough, California*

**Michael McGinnis**, Acting Director, Coastal Policy Center, University of California, Santa Barbara • *Ecosystem-Based Planning and the Southern California Bight*

**Dean Wendt**, Assistant Professor, Cal Poly San Luis Obispo • *Marine Ecosystem-Based Management in Action: A Case Study of SLOSEA in Morro Bay, California*





## ENDOCRINE DISRUPTION: A NEW THREAT FOR COASTAL FISH

### ROOM 202A

**Co-Chairs:** **Dan Schlenk**, Professor, University of California, Riverside  
**Doris Vidal**, Scientist, Southern California Coastal Water Research Project

**Organizer:** **Doris Vidal**, Scientist, Southern California Coastal Water Research Project

**James Alamillo**, Urban Programs Manager, Heal the Bay • *Educating Subsistence Anglers about Contaminated Fish in Los Angeles County*

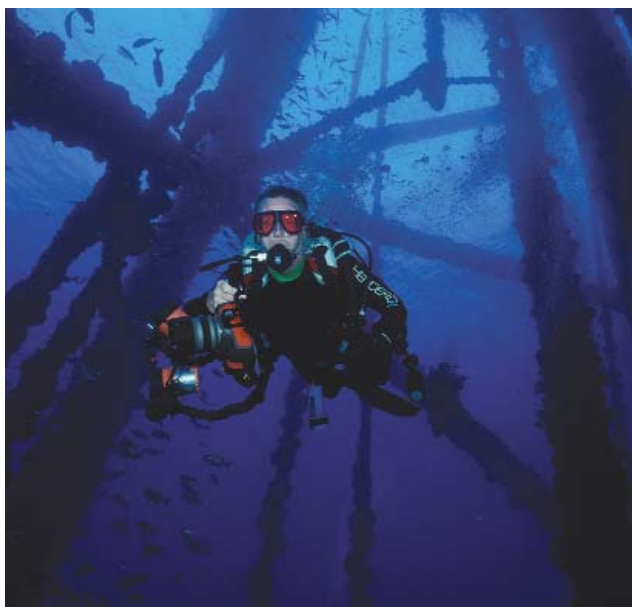
**Kevin Kelley**, Professor, California State University Long Beach,  
 • *Endocrine Disruption in Marine Fish*

**Daniel Schlenk**, Professor, University of California, Riverside,  
 • *Relationships between Metrics of Reproductive Fitness, Population, and Exposure to Estrogenic Chemicals in Demersal Flatfish Collected near the Municipal Wastewater Outfall of Orange County, California, U.S.A.*

**Jim Stahl**, Chief Engineer and General Manager, Los Angeles County Sanitation Districts • *Promoting Public Stewardship: The "No Drugs Down the Drain" Campaign*

**Doris Vidal**, Scientist, Southern California Coastal Water Research Project • *Sexual Abnormalities and Other Endocrine Abnormalities in Southern Coastal California Coastal Flatfish*

**Carol Vines**, Research Associate, Bodega Marine Laboratory, University of California, Davis • *Gillichthys mirabilis: A Model Species for Detecting Endocrine Disruption in California Wetlands*



Diver at Oil Rig, Texas

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## RIGS TO REEFS: DECOMMISSIONING OF CALIFORNIA'S OIL PLATFORMS

### ROOM 201B

**Co-Chairs:** **Drew Bohan**, Executive Policy Officer, California Ocean Protection Council

**Sonke Mastrup**, Deputy Director, Wildlife and Inland Fisheries, California Department of Fish and Game

#### Panelists for Discussion:

**Linda Krop**, Chief Counsel, Santa Barbara Office, Environmental Defense Center • *Rigs to Grief: Leaving Abandoned Offshore Oil Rigs in Place*

**Herb Leedy**, Biologist, Minerals Management Service • *The Use of Oil and Gas Structures in State-Sponsored Artificial Reef Programs: Minerals Management Service Perspective and Policy*

**Milton Love**, Research Biologist, Marine Science Institute, University of California, Santa Barbara • *An Overview of the Fish Assemblages of Oil and Gas Platforms and Natural Reefs off Southern California*

**Donna Schroeder**, Staff Research Associate, Marine Science Institute, University of California, Santa Barbara • *Ecological and Political Issues Surrounding Decommissioning of Offshore Oil and Gas Facilities in California*

**George Steinbach**, California Artificial Reef Enhancement (CARE) Program • *CARE's Perspective on Decommissioning of Oil Platforms*

**John Ugoretz**, Nearshore Ecosystem Coordinator, California Department of Fish and Game • *Moving Towards a State Policy on Rigs-to-Reefs: Considerations for Leaving Decommissioned Platforms in Place*

## VALUING CALIFORNIA'S COAST

### ROOM 201A

**Chair and Organizer:** **Judy Kildow**, Professor, California State University Monterey Bay

**Judy Kildow**, Professor, California State University Monterey Bay,

• *Recent Estimates of California's Coastal and Ocean Economics*

**Phillip King**, Associate Professor, San Francisco State University,  
 • *Estimating Attendance at California's Beaches: An Overview with an Analysis of Data from South Carlsbad and the City of Encinitas*

**Alistair McIlgorm**, Director and Professor, National Marine Science Centre • *Either Side of the Ocean: An International Comparison of Coastal Issues in California and Eastern Australia*

**Chad Nelsen**, Environmental Director, Surfrider Foundation • *Non-Market Valuation of Surfing at Trestles in San Clemente, California*

**Linwood Pendleton**, Associate Professor, Department of Environmental Health Sciences, University of California, Los Angeles,  
 • *The Non-Market Impact of Beach Water Quality Impairment in Southern California*

**Rodney Weiher**, Chief Economist, NOAA • *Developing Essential Coastal and Marine Economic, Demographic, and Social Data for Regional Ecosystems Management*



## PLACE-BASED MANAGEMENT

### REGENCY A

**Chair:** Charles Wahle, Director, NOAA Marine Protected Areas Center Science Institute

**Chris Caldwell**, Senior Scientist, NOAA Biogeography Team • *Southern California Biogeography Research Provides Powerful Assessment Tool to Aid Both Science and Policy Arenas*

**Herrick Hanks**, Monument Manager, Bureau of Land Management, U.S. Department of the Interior • *Rocks, Ecosystems, Partners, and Gateways: Assembling the Components for the Implementation of the California Coastal National Monument*

**Richard McGonigal**, Environmental Policy Advisor, Monterey Bay National Marine Sanctuary • *Evaluating and Siting New Marine Protected Areas in the Offshore Waters of the Monterey Bay National Marine Sanctuary*

**Jan Roletto**, Research Coordinator, Gulf of the Farallones National Marine Sanctuary • *SEAS and IOOS: Sanctuary Ecosystem Assessment Surveys and Integrated Ocean Observing Systems*

**Brian Tetreault**, Vessel Traffic Services Program Manager, United States Coast Guard • *Vessel Traffic Management Measures to Protect the Monterey Bay National Marine Sanctuary: Ten Years Later*

**Charles Wahle**, Director, NOAA Marine Protected Areas Center Science Institute • *The State of Place-Based Marine Management in U.S. Waters: Emerging National and West Coast Trends*

## INTEGRATING EMERGING TECHNOLOGIES

### SHORELINE B

**Chair:** Krista Kamer, Scientist, Moss Landing Marine Laboratories

**Steve Lonhart**, Senior Scientist, Monterey Bay National Marine Sanctuary • *The Sanctuary Integrated Monitoring Network (SIMoN): Tracking Ecosystem Health in California's Marine Environment*

**Krista Kamer**, Scientist, Moss Landing Marine Laboratories • *The California State University Center for Integrative Coastal Observation, Research, and Education (CICORE): Research for the Sustainable Use of California's Coastal Resources*

**Gregory Crawford**, Professor and Chair, Oceanography, Humboldt State University • *IOOS along the North Coast: New, Key Insights from Monitoring the Nearshore Environment*

**Michael Weise**, Post Doctorate Student, University of California, Santa Cruz • *Animal Platforms for the Collection of Oceanographic Data as Part of an Integrated Ocean Observation System*

**Steven Bograd**, Environmental Research Division, Southwest Fisheries Science Center, NOAA • *Using Pelagic Predators as Oceanographic Sensor Platforms in the Eastern North Pacific*

## TOOLS TO SUPPORT THE CALIFORNIA SEDIMENT MASTER PLAN

### SHORELINE A

**Chair and Organizer:** Clifton Davenport, Senior Engineering Geologist, California Geological Survey

**Susan Ming**, Chief Coastal Studies Group, U.S. Army Corps of Engineers, Los Angeles District • *An Innovative "Super-Regional" Resource Management Initiative: California Coastal Sediment Master Plan*

**David Cannon**, President/Principal Engineer, Everest International Consultants • *An Analysis of the Policies, Procedures, and Regulations Related to Regional Sediment Management along the California Coast*

**MaLisa Martin**, Study Manager, U.S. Army Corps of Engineers • *GIS Development for the California Coastal Sediment Master Plan*

**Christopher Webb**, Senior Coastal Scientist, Moffatt and Nichol, • *The Sand Compatibility and Opportunistic Use Program*

**Katherine Farnsworth**, Research Geologist, U.S. Geological Survey, • *Storm Timing and Dispersal of Fine Sediment into the California Coastal Ocean*

**Karen Green**, Senior Scientist, Science Applications International Corporation • *Biological Tools to Support Protection of California's Natural Resources during Sediment Management Activities*

## WILDLIFE MANAGEMENT AND CONSERVATION

### REGENCY D

**Chair:** Alice Chiu, Sea Grant Fellow, Ocean Program, California Resources Agency

**Columbine Culberg**, Ocean Etiquette Program Coordinator, NOAA National Marine Sanctuary Program • *Ocean Etiquette: Protecting California's Wildlife through Science, Management, and Outreach*

**Monica DeAngelis**, Marine Mammal Biologist, NOAA National Marine Fisheries Service • *Non-Lethal Deterrence of Pacific Harbor Seals and California Sea Lions*

**John Hildebrand**, Professor, Scripps Institution of Oceanography, • *Effects of Ocean Ambient Noise on the Marine Ecosystem off California*

**Christina Fahy**, Sea Turtle Recovery Coordinator, National Marine Fisheries Service • *U.S. Domestic and International Activities to Aid in the Conservation and Recovery of Sea Turtles*

**Annie Little**, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service, • *Restoration of Bald Eagles to the Northern Channel Islands*

**John Daley**, Chairman, California Ships to Reefs • *Using Surplus Ships as Man-Made Reefs in California*



## CLEAN BEACHES INITIATIVE GRANT PROGRAM

### REGENCY C

**Co-Chairs:** Mark Gold, Executive Director, Heal the Bay

Laura Peters, Clean Beaches Initiative Program Manager, State Water Resources Control Board

**Organizer:** Laura Peters, Clean Beaches Initiative Program Manager, State Water Resources Control Board

**John Largier**, Professor, Bodega Marine Lab, University of California, Davis • *Improving Water Quality at California's Enclosed Beaches*

**Robert Stein**, Principal Scientist, Public Works, City of Newport Beach • *Clean Beaches Initiative Projects in Newport*

**James Rasmus**, Project Director, PBS&J • *Meeting New Demands: Disinfecting Urban Runoff*

**Katherine Weldon**, Clean Water Program Manager, City of Encinitas, • *Experiences in Using UV Light to Disinfect Urban Runoff*

**John Dorsey**, Associate Professor, Loyola Marymount University, • *Ridding California Beaches of Fecal Bacteria: An Assessment of Clean Beach Initiative Projects*

## ATMOSPHERIC DEPOSITION: COLLABORATION BETWEEN THE AIR AND WATER BOARDS

### REGENCY B

**Chair:** Jerry Secundy, Board Member, State Water Resources Control Board

#### Panelists for Discussion:

**Geoff Brosseau**, Executive Director, California Stormwater Quality Association

**Joe Cassmassi**, Planning and Rules Manager, South Coast Air Water Management District

**Eileen McCauley**, Manager, Atmospheric Processes Research Section, Air Resources Board

**Ken Schiff**, Deputy Director, Southern California Coastal Water Research Project

**Jerry Secundy**, Board Member, State Water Resources Control Board

## SEDIMENT QUALITY OBJECTIVES FOR CALIFORNIA BAYS AND ESTUARIES: DEVELOPMENT AND APPLICATION

### REGENCY E

**Chair and Organizer:** Steven Bay, Toxicologist, Southern California Coastal Water Research Project

**Steven Bay**, Toxicologist, Southern California Coastal Water Research Project • *Development and Validation of a Multiple Line of Evidence Framework for Integrating Sediment Quality Data*

**Michael Connor**, Executive Director, San Francisco Estuary Institute, • *A Framework for Assessing Effects of Sediment Contaminants to Wildlife and Humans*

**David Montagne**, Senior Environmental Scientist, Los Angeles County Sanitation Districts • *Challenges for Using Sediment Quality Objectives in Regulatory Programs: A Permittee's Perspective*

**Ananda Ranasinghe**, Senior Scientist, Southern California Coastal Water Research Project • *A Measure of Benthic Invertebrate Community Condition for California Bays and Estuaries*

**Kerry Ritter**, Statistician, Southern California Coastal Water Research Project • *Development and Evaluation of Chemical SQGs Based on Benthic Macrofauna Responses to Sediment Chemistry*



Giant Kelp (*Macrocystis pyrifera*)

Steve Lonhart/MBNMS





## SUBTIDAL MANAGEMENT AND MONITORING

### REGENCY A

**Chair:** Paul Thayer, Executive Officer, California State Lands Commission

**Mary Bergen**, Environmental Scientist, California Department of Fish and Game • *Accuracy and Precision of Measurements of Transect Length and Width Made with a Remotely Operated Vehicle*

**Natalie Cosentino-Manning**, Marine Restoration Specialist, NOAA Restoration Center • *Restoring California's Subtidal Marine Habitats*

**Gary Davis**, Visiting Chief Scientist, U.S. National Park Service, • *Channel Islands National Park's Kelp Forest Monitoring Program: 25 Years of Cooperation, Fishery Independent Data Collection, and Marine Protected Area Evaluation*

**Andrew DeVogelaere**, Research Coordinator, Monterey Bay National Marine Sanctuary • *Protecting Deep-Sea Corals by Including Davidson Seamount in the Monterey Bay National Marine Sanctuary*

**Melissa Neuman**, Fisheries Biologist, National Marine Fisheries Service, • *Developing a Sound Recovery Strategy for the First Endangered Marine Invertebrate, White Abalone (Haliotis Sorensen)*

**Craig Shuman**, Director, Reef Check California Program, Reef Check Foundation • *Reef-Check California: A Tropical Model of Community Monitoring in a Temperate Environment*

## SEAFLOOR MAPPING

### SHORELINE B

**Chair:** Rikk Kvitek, Professor, California State University Monterey Bay

**Guy Cochrane**, Marine Geophysicist, U.S. Geological Survey • *Geologic and Habitat Mapping and GIS*

**Peter Dartnell**, Physical Scientist, U.S. Geological Survey • *Huntington Beach 1:24,000 Scale Coastal Mapping: Integrating Bathymetry, Topography, and Geology*

**Mercedes Erdey-Heydorn**, Research Assistant, Moss Landing Marine Laboratories • *The Potential Marine Benthic Habitat Types of the Point Reyes Region: Mapping the Shallow Nearshore with Multibeam Side-Scan Sonar*

**Kerry Ritter**, Statistician, Southern California Coastal Water Research Project • *Multi-Lag Cluster Enhancement of Fixed Grids for Variogram Estimation in Near Coastal Systems*

**Dale Roberts**, Marine Ecologist, Cordell Bank National Marine Sanctuary • *Seafloor Mapping as a Foundation for Resource Conservation at the Cordell Bank National Marine Sanctuary*

**Chris Wills**, Supervising Engineering Geologist, California Geological Survey • *Regional Geologic and Habitat Maps: Tools for Understanding Habitats, Environments, Resources, and Hazards*

**Mary Yoklavich**, Research Biologist Supervisor, Southwest Fisheries Science Center, Fisheries Ecology Division, NOAA National Marine Fisheries Service • *Fishery-Independent Assessments of Demersal Fishes using Habitat Maps and Direct Observations from Submersibles*

## IMPACTS OF POLLUTION ON SEA OTTER HEALTH

### REGENCY D

**Chair:** David Jessup, Senior Wildlife Veterinarian/Supervisor, Office of Spill Prevention and Response, California Department of Fish and Game

**Patricia Conrad**, Professor, School of Veterinary Medicine, University of California, Davis • *Linkages Between Cats, Run-Off, and Brain Disease in Sea Otters*

**Christine Kreuder-Johnson**, Assistant Professor, Wildlife Health Center • *Linking Individual Behavior to Ecosystem Health: Tracking Pathogen Exposure in Southern Sea Otters*

**Melissa Miller**, Wildlife Veterinarian and Pathologist, California Department of Fish and Game • *Environmental, Demographic, and Spatial Patterns of Enteric Bacterial Infection in Southern Sea Otters in Central California*

**Teri Nicholson**, Senior Research Biologist, Monterey Bay Aquarium, • *Recent Trends in Live-Strandings of the Southern Sea Otter and Relevance to Mortality*

**David Jessup**, Senior Wildlife Veterinarian/Supervisor, Office of Spill Prevention and Response, California Department of Fish and Game, • *The Big Picture: What Can Be Done About the Various Forms of Pollution Effecting Sea Otters and their Ecosystem?*

**Karen Worcester**, Staff Environmental Scientist, Central Coast Water Board • *The Canary in the Coal Mine: How Do Sea Otter Health Issues Shape a Regulatory Response?*



Southern sea otter (*Enhydra lutris nereis*)

Josh Pederson/MBNMS





## WATERSHED MANAGEMENT: MANAGING LAND-BASED SOURCES OF RUNOFF

### REGENCY C

**Chair and Organizer:** Eric Stein, Principal Scientist, Southern California Coastal Water Research Project

**John Hamrick**, Director, Simulation and Modeling, Tetra Tech Inc.,  
 • *Modeling and Managing Land-Based Sources of Runoff on Estuarine and Near-Shore Resources*

**Drew Ackerman**, Modeler, Southern California Coastal Water Research Project • *Linking Watershed and Estuary Models for Characterization of an Effluent Dominated Estuary*

**Eileen Deng**, Graduate Student, Department of Civil and Environmental Engineering, University of California, Los Angeles,  
 • *Simulation of Stormwater Plumes in the Southern California Bight using the Regional Ocean Modeling System*

**Susan Paulsen**, Vice President, Flow Science Incorporated • *Use of Models to Assess Water Quality Associated with a Regional Seawater Desalination Plant in Carlsbad, California*

**John Oram**, Environmental Scientist, San Francisco Estuary Institute,  
 • *Modeling the Fate of Particle-Associated Contaminants in San Francisco Bay, California*

**Jeffrey Haltiner**, Principal, Philip Williams and Associates, Ltd.,  
 • *Managing Sediment Processes in the Morro Bay Ecosystem*

## RESOLVING AIR POLLUTION IMPACTS OF MARITIME CARGO MOVEMENT

### REGENCY B

**Chair and Organizer:** James Fawcett, Director, Marine Science and Policy Outreach, University of Southern California Sea Grant Program

**Genevieve Giuliano**, Director, Long Beach METRANS Project, University of Southern California/California State University,  
 • *Optimizing Southern California Cargo Movement Flows to Reduce Air Emissions*

**Robert Kanter**, Director of Planning and Environmental Affairs, Port of Long Beach • *The San Pedro Bay Clean Air Action Plan as a Model for Green Port Air Quality Improvement*

**Alan Lowenthal**, California State Senator, 27th District • *A Legislator's Role in Facilitating Clean Air and Goods Movement*

**Richard Powers**, Executive Director, Gateway Cities Council of Governments • *Bringing Local Communities to the Goods Movement Table*

**Barry Wallerstein**, Executive Officer, South Coast Air Quality Management District • *The Ports and the Air Quality Management District: Working Together to Move Cargo and Clean the Air*

## CHALLENGES AND PROGRESS IN MARINE DEBRIS REMEDIATION EFFORTS

### REGENCY E

**Chair:** Nir Barnea, Physical Scientist, NOAA Marine Debris Program  
**Organizer:** Lori Arguelles, President and CEO, National Marine Sanctuary Foundation

**Laurie Bauer**, Knauss Sea Grant Fellow, NOAA Biogeography Team,  
 • *Characterization of Marine Debris in Gray's Reef National Marine Sanctuary, Georgia*

**Christopher Campbell**, Executive Director, Coalition for Environmental Protection Restoration • *Market Based Systems for Reducing Trash Loading to Los Angeles Area Watersheds*

**Kirsten Gilardi**, Executive Director, SeaDoc Society, Wildlife Health Center, University of California, Davis • *Derelict Fishing Gear Removal in California*

**Leslie Mintz**, Legislative Director, Heal the Bay • *The Los Angeles River Trash Total Maximum Daily Loads: Perspectives on the Road to Success*

**Charles Moore**, Founder, Algalita Marine Research Foundation,  
 • *Synthetic Polymers in the Marine Environment: What We Know, What We Need To Know*



Beach Clean-Up at Ocean Beach, San Francisco

Chris Parry/California Coastal Commission



**Babagana Abubakar**, Senior Traffic Officer, Nigeria Ports Authority,  
• *Atlantic and Indian Oceans Pollution in Africa*

**Babagana Abubakar**, Senior Traffic Officer, Nigeria Ports Authority,  
• *New Challenges Threatening the Ozone Layer*

**Katie Arkema**, Ph.D. Candidate, Marine Ecology, University of California, Santa Barbara • *The Ability of Kelp Forests to Filter Nearshore Waters and Impact Water Quality*

**Edward Armstrong**, Data Engineer, Jet Propulsion Laboratory • *A Data Management Infrastructure for Oceanographic Satellite Products and Implications for Coastal Management*

**Christy Bell**, Research Specialist, Ecology and Evolutionary Biology Department, University of California, Santa Cruz • *An Assessment of the Impact of Withering Disease on the Genetic Structure of Black Abalone Populations: Implications for Recovery and Restoration*

**Eric Bjorkstedt**, Research Fisheries Biologist, Southwest Fisheries Science Center, NOAA National Marine Fisheries Service • *Ocean Observing Off Northern California: Achievements and Aspirations of a Partnership Between NOAA's National Marine Fisheries Service and Humboldt State University*

**Joe Breman**, Data Model Program Manager, ESRI • *Ocean Observing*

**Carrie Bretz**, Research Associate, California State University Monterey Bay • *Seafloor Mapping Lab (SFML) at California State University Monterey Bay: Supporting Marine Stewardship Through Science, Technology, and Education*

**Erickson D. Burres**, Citizen Monitoring Coordinator, Surface Water Ambient Monitoring Program Clean Water Team, State Water Resources Control Board • *Demographics of Citizen Monitors within the Coastal Zone*

**Linda Catton**, Graduate Student, Scripps Institution of Oceanography, • *Considering Allee Effects when Evaluating Overfished Benthic Broadcast Spawning in Vertebrate Populations: A Case Study of a Pink Abalone (*Haliotis Corrugata*) Population near San Diego, California*

**Douglas Campbell**, Principal, Campbell and Campbell • *Ellen Browning Scripps Memorial Park, La Jolla, California: Conceptual Development Plan*

**Mitchell Craig**, Assistant Professor, California State University East Bay, • *In-Situ Monitoring of Water Quality in South San Francisco Bay*

**Carolina DaCosta**, Research Specialist, University of California, Santa Cruz • *Reserves in Reverse: The Recent Change in Access Status of Stornetta Ranch and the Resulting Effect on Red Abalone Populations*

**Amy Dean**, Education Manager, Farallones Marine Sanctuary Association • *Investigating Demographics and Acanthocephalan Parasite Load of *Emerita* analoga: A Model to Engage Urban Youth*

**Tonya Del Sontro**, Graduate Student, University of California, Santa Barbara • *Beach Tar Accumulation at Coal Oil Point, California: Distribution, Variation, and Possible Sources*

**Bridget Dobrowski**, Agriculture Water Quality Coordinator, Monterey Bay National Marine Sanctuary • *Agriculture Water Quality Alliance (AWQA): Meeting the Needs Of Agriculture to Protect Coastal Water Quality*

**Changming Dong**, Assistant Researcher, Institute of Geophysics and Planetary Physics, University of California, Los Angeles • *Numerical Simulation of DDT Distribution in Southern California Bight*

**Gary Duby**, M.S. Student, California State University Los Angeles, • *Observing Solute Flux Changes Over a Twenty-Four Period in the San Diego Creek Watershed*

**Eric Eglund**, Environmental Engineer, L-3 California Tube Laboratory, • *Sonar Return Quantification of Hydrocarbon Spatial and Temporal Emissions*

**Ian Faloona**, Assistant Professor, University of California, Davis, • *Atmospheric Climate Monitoring at the Bodega Marine Lab*

**Lara Ferry-Graham**, Program Manager, Water Intake Structure Environmental Research (WISER), Moss Landing Marine Laboratories, • *Evaluating the Ecological Effects of Once-Through Cooling: Contributions of the WISER Program*

**David Foley**, West Coast Coordinator, NOAA CoastWatch Program, • *CeNCOOS Demonstration Project: Meeting Central and Northern California's Needs for Marine Information*

**Stephen Foss**, Environmental Scientist, Office of Spill Prevention and Response, California Department of Fish and Game • *California Aquatic Non-Native Organism Database (CANOD)*

**Hartmut Frenzel**, Programmer/Analyst, Institute of Geophysics and Planetary Physics, University of California, Los Angeles • *Modeling of a Coastal Upwelling Event in the Southern California Bight*

**Suzanne Gilmore**, Environmental Scientist, California State Lands Commission • *Considerations for the Treatment of Ballast Water in California*

**Kristen Green**, Research Assistant, Moss Landing Marine Laboratories, • *Ecology and Movements of Nearshore Fishes Near Bolinas, California*

**Ami Groce**, Marine Biologist, City of San Diego • *Preliminary Results of the San Diego Sediment Mapping Study: Sediment Conditions on the Mainland Shelf During 2004*

**Doyle Hanan**, Marine Research Consultant, Hanan and Associates Inc., • *Market Squid Industry-Agency Cooperative Research and Biological Observations*



**Nick Haring**, Marine Biologist, Marine Biology Laboratory, City of San Diego • *A 10-Year Regional Assessment of Benthic Infaunal Assemblages off the Coast of San Diego*

**Kerry Howard**, Executive Director, Office of Habitat Management and Permitting, Alaska Department of Natural Resources, • *Strategies to Protect Coastal Resident Fish Passage*

**Michele Jacobi**, Environmental Scientist, NOAA Office of Response and Restoration • *Watershed Database and Mapping Project for the Southern California Bight*

**Dave James**, Marine Biologist, Marine Biology Laboratory, City of San Diego • *Water Quality in the South Bay Region of San Diego, Southern California: Spatial and Temporal Trends in Bacteria Levels*

**David Kushner**, Marine Biologist, Channel Islands National Park, • *Assessment of the Channel Islands' Marine Protected Areas using a Long-Term Ecological Monitoring Program*

**Chris LaFranchi**, Social Science Program Coordinator, Channel Islands National Marine Sanctuary • *Spatial Use Patterns Among Non-Consumptive Users of the Channel Islands*

**David Lapota**, Senior Scientist, Space and Naval Warfare Systems Center, San Diego • *Current Status of Green Abalone Outplanting off Point Loma, San Diego*

**Homa Lee**, Research Civil Engineer, U.S. Geological Survey • *Sediment and Containment Transport in the California Urban Ocean*

**Ira Leifer**, Associate Researcher, University of California, Santa Barbara • *Factors Affecting Oil Emissions from an Abandoned Oil Well in Nearshore Waters off Summerland, California*

**Anita Leinweber**, Assistant Researcher, Institute of Geophysics and Planetary Physics, University of California, Los Angeles • *Santa Monica Bay Observatory: Mooring and Shipboard Observations*

**Judith Lemus**, Director of Education, Wrigley Institute for Environmental Studies, University of Southern California, • *QuikScience: An Innovative Approach to Engage Diverse Students in Ocean Sciences*

**Regan Long**, Surface Current Mapping Coordinator, Coastal Ocean Currents Monitoring Program, San Francisco State University • *The Effect of Salinity on Monitoring San Francisco Bay Surface Currents using Surface Current Monitoring Instruments (SMCI)*

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**Kelly Munkittrick**, Associate Director, Canadian Rivers Institute, • *Development of an Effects-Based Monitoring Protocol for Fish Populations in Coastal Areas*

**Nikolay Nezlin**, Scientist, Southern California Coastal Water Research Project • *Stormwater Runoff Plumes in Southern California from Satellite Data*

**Eric Niven**, Graduate Student, Moss Landing Marine Laboratories, California State University • *Big Sur Integrated Mapping Project*

**Jeffrey Onsted**, Doctoral Candidate, Sea Grant Trainee, University of California, Santa Barbara • *California's Coastal Zone Management Program: Retaining Agricultural Land in the Face of Urban Growth*

**Dean Pasko**, Marine Biologist, Marine Biology Laboratory, City of San Diego • *Benthic Sediment Conditions in Mainland Shelf Habitats off San Diego 10 Years Later*

**Anitra Pawley**, Principal Researcher, University of California, Davis, • *Coastal Watershed Assessment: A Template for Assessing Conditions at the Watershed Level*

**Josh Pederson**, Outreach Specialist, NOAA • *OceanObs: A Web-Based Inventory of Ocean Observing Activities in the Central and Northern California Ocean Observing System (CeNCOOS)*

**Jian Peng**, Scientist, Southern California Coastal Water Research Project • *Organochlorine Pesticides in Stormwater Entering the Newport Bay Watershed*

**Deanna Pinkard**, Research Fisheries Biologist, NOAA Fisheries • *The Importance of Detailed Ocean Mapping for Assessing the Status of Threatened Marine Organisms: A Case Study*

**Benjamin Pister**, Graduate Student, University of California, San Diego • *Community Composition and Diversity on Anthropogenic Substrates in Urban Rocky Intertidal Environments*





**David Pohl**, Project Engineer, Weston Solutions • *Protection and Restoration of Newport Beach Marine Life Refuge: Implementing the Goals of the California Ocean Protection Council Strategic Plan at Little Corona*

**Jane Reid**, Geologist, U.S. Geological Survey • *Sedimentary Character of California's Continental Margin: Views from usSEABED*

**Pedro Restrepo**, Senior Scientist, NOAA/National Weather Service, NOAA • *Atlas 14: The New Precipitation Frequency Atlas for California*

**Karen Reyna**, Resource Protection Specialist, Gulf of the Farallones National Marine Sanctuary • *Central California Coast Seabird Colony Protection Program: Reducing Human Disturbances through Monitoring, Coordinated Management, and Outreach*

**Santi Roberts**, California Project Manager, Oceana • *Recommendations Towards Ecosystem-Based Fisheries Management of the California Current Large Marine Ecosystem*

**Dan Robinette**, Vandenberg Seabird Project Manager, Conservation Science, Point Reyes Bird Observatory • *Using Top Predators to Assess the Efficacy of the Vandenberg State Marine Reserve*

**Dale Robinson**, Senior Research Scientist, San Francisco State University, • *SF-BEAMS: An Evolving Estuarine Ocean Observing System*

**Rondi Robison**, Academic Coordinator, Central California Ocean Observing System, University of California, Santa Cruz • *The Center for Integrated Marine Technologies: Long-Term Ocean Observing System in Monterey Bay Provides Oceanographic Data and Monitoring Information toward Improving the Understanding of Ocean and Coastal Ecosystems*

**Dirk Rosen**, President, Marine Applied Research and Exploration, • *Remote Operated Vehicles: A New Approach to Monitor the Effectiveness of Marine Protected Areas on Reef Finfish*

**Yelena Sapozhnikova**, Research Chemist, NOAA National Ocean Service, • *Antifouling Pesticides in the Coastal Waters of Southern California*

**Jessica Schneider**, Chief Marine Technician, San Francisco Bay National Estuarine Research Reserve (NERR) • *San Francisco Bay NERR System Wide Monitoring Program: Ocean Observing in Coastal and Inland Waters*

**Frank Shaughnessy**, Associate Professor of Botany, Humboldt State University • *The Relative Importance of Nitrogen and Suspended Sediments to the Eelgrass Ecosystem in Humboldt Bay*

**G. Jason Smith**, Technical Coordinator, Alliance for Coastal Technologies Pacific Coast, Moss Landing Marine Laboratories • *The Alliance for Coastal Technologies (ACT): A National Partnership Supporting Coastal Monitoring Efforts*

**Timothy Stebbins**, Senior Marine Biologist, Marine Biology Laboratory, City of San Diego • *Sediment Quality on the Continental Slope off San Diego, Southern California: A Pilot Study of Deep Benthic Habitats*

**Christina Swanson**, Senior Scientist, The Bay Institute • *Measure for Measure: Using an Ecological Scorecard to Integrate Information, Evaluate Ecosystem Condition, and Improve Public Understanding and Outreach*

**Lynn Takata**, Staff Environmental Scientist, California State Lands Commission • *Reducing Nonindigenous Species Release through Commercial Vessel Fouling in California: Considerations, Challenges, and a Way Forward*

**Carlos Torres**, Doctor, Computational Science Research Center, San Diego State University • *Modeling 3D Coastal Circulation in Boundary-Fitted Coordinates: The GCOM Project*

**Jerry Wanetick**, Data Manager and Director of Information Systems, Integrative Oceanography Division, Scripps Institution of Oceanography • *A Real-Time Data Acquisition, Storage and Access System*

**Jonathan Warrick**, Research Oceanographer, U.S. Geological Survey Coastal and Marine Geology • *River Plume Properties and Dynamics Offshore Southern California*

**Dolores Wesson**, Coordinator, Coastal Storms Program • *Coastal Storms in Southern California: Novel Decision-Support Systems and Tools*

**David Witting**, NOAA • *Factors Influencing the Spatial Distribution of Contaminants in Fishes Occupying the Southern California Coast*

**Sara Worden**, Research Specialist, Partnership for Interdisciplinary Studies of Coastal Oceans, University of California, Santa Cruz, • *Serious Decline in Central California Black Abalone Populations: Outlook for Recovery and Community Structure Implications*

**Timothy Zimmerman**, Marine Science Communication Specialist, University of California, Berkeley • *Ocean Protection Through Effective Communication: Ocean Knowledge, Misconceptions, and Public Opinion*

# NOTES







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